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Oct. 1930.

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The National Smoke Abatement Society

**FIRST
ANNUAL
REPORT
1930**

National Smoke Abatement Society

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Chairman and Hon. Treasurer : Alderman WILL MELLAND, J.P.

Hon. Advisory Secretary : Sir LAWRENCE W. CHUBB.

General Secretary and Editor : ARNOLD MARSH, M.Sc. Tech.

Vice-Presidents :

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The Earl of Stamford.
Lord Newton.
Viscount Cecil of Chelwood.
The Rt. Rev. The Lord Bishop of London
The Very Rev. The Dean of Wells.
The Very Rev. The Dean of Manchester
Sir Napier Shaw, Sc.D., F.R.S.
Sir Thomas Barlow, Bart., K.C.V.O.,
F.R.S., M.P.

Sir Oliver Lodge, F.R.S., D.Sc.
J. W. Graham, D.Litt., M.A.
Peter Fyfe.
W. Brownhill Smith,
M.V.O., O.B.E., D.L.
E. D. Simon, M.P.
Dr. J. Johnstone Jervis.
Coun. W. E. Hincks, J.P.

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W. D. Carol, F.S.A.
Professor Cohen, Ph.D., F.R.S.
Henry Wade Deacon, C.B.E., J.P.
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Randolph A. Glen.
Sir Francis Goodenough, C.B.E.

Mrs. Mary Higgs.
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A. J. Martin, M.Inst.C.E.
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F.R.C.P., Edin.
Dr. H. Osborne, M.D., M.R.C.S.
Major General S. H. Powell.
Professor C. H. Reilly, O.B.E., M.A.,
F.R.I.B.A.
Rev. Canon Morley Stevenson.
A. E. Tanner.
W. Tapper, A.R.A., F.R.I.B.A.
J. Bell White.

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Tyne.
A. Arthurs.
Councillor W. Asbury, Sheffield,
Rotherham and District Joint
Committee.
Dr. J. R. Ashworth.
-J. W. Beaumont, Halifax.
Dr. R. Veitch Clark, Manchester.
R. H. Clayton.
Miss M. Fitzgerald.
-Charles Gandy.
Councillor Hall, Liverpool.
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Mrs. M. Jast.

Dr. J. Johnstone Jervis, Leeds.
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A. McCulloch.
Bailie Munro, Glasgow.
Dr. A. A. Mussen, Liverpool.
Dr. H. P. Newsholme, Birmingham.
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E. W. L. Nicol.
J. A. Robinson, Bristol.
-Dr. E. W. Smith.
Dr. E. H. Walker, Stretford.
W. B. MacLusky.

Affiliated Societies and Representatives Appointed to the Council :

- BEAUTIFUL OLDHAM SOCIETY.—Harry Chadderton, Miss Fletcher.
BRITISH MEDICAL ASSOCIATION.—Dr. T. Ridley Bailey, Dr. G. Clark Trotter.
DENTAL ASSOCIATION.—A. E. Rowlett.
INSTITUTE OF FUEL.—E. W. L. Nicol.
INSTITUTION OF ELECTRICAL ENGINEERS.—W. C. P. Tapper, Lt.-Col. W. A. Vignoles.
INSTITUTION OF GAS ENGINEERS.—Charles F. Botley, Edwin H. Hudson.
INSTITUTION OF HEATING AND VENTILATING ENGINEERS.—Walter Yates, Frank Biggin.
SANITARY INSPECTORS' ASSOCIATION.—Fred Pollard..
SOCIETY OF MEDICAL OFFICERS OF HEALTH.—Dr. Cyril Banks, Dr. T. W. Naylor Barlow.

*Affiliated Local Authorities and Representatives
Appointed to the Council :*

- BERMONDSEY.—Mr. H. W. Bush.
BINGLEY.—
BIRKENHEAD.—
BIRMINGHAM.—Alderman Lucas, Dr. H. P. Newsholme (Executive).
BLACKBURN.—Alderman Greeves, Dr. T. V. Thierens.
BOOTLE.—Councillor Haworth, Dr. F. T. H. Wood.
BRIGHTON.—Councillor H. B. Elliott, J.P., Alderman H. M. Black, J.P.
BRISTOL.—Alderman H. J. Maggs, Mr. J. A. Robinson (Executive).
BURNLEY.—Alderman Lees, J.P., Councillor Munro.
BURY.—Councillor Pickles, Councillor Potts.
BUXTON.—Mr. W. O. Coates.
CARDIFF.—Alderman John Donovan, J.P., Dr. Ralph M. F. Picken.
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DONCASTER.—Councillor R. M. Jackson, J.P., Dr. D. L. Anderson.
DUNDEE.—Convenor Simon Fraser, Mr. Robert Mitchell.
EALING.—The Medical Officer of Health.
EAST RETFORD.—
ECCLES.—Alderman Robert Evans, J.P., Mr. C. W. Laskey.
EDINBURGH.—Councillor Given, Mr. Allan Ritchie.
EDMONTON.—Councillor H. Barrass, J.P., Councillor N. Joslyn.
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FARNWORTH.—Councillor Rev. J. Wilcockson, Councillor R. H. Cunliffe, J.P.
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HORWICH.—

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LAMBETH.—Councillor W. G. Geary, Dr. A. G. G. Thompson.
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LEICESTER.—Councillor C. E. Keene (Executive).
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MIRFIELD.—Councillor A. Kilner, Councillor Hallas Lockwood.
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OLDHAM.—Alderman Bolton, Dr. James B. Wilkinson.
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PRESTON.—
READING.—Councillor Holden, Councillor Quelch.
RICHMOND, Surrey.—Dr. C. S. Brebner, D.S.O., Mr. George Laws.
ROCHDALE.—Alderman Edward Thomas, Dr. A. G. Anderson.
ROYTON.—Councillor Samuel Lees, J.P., Councillor T. H. Lowe.
SALFORD.—
SHEFFIELD, ROTHERHAM AND DISTRICT JOINT COMMITTEE.—Councillor W. Asbury (Executive).
SMETHWICK.—Alderman Mrs. Sands (Executive), Councillor Perry.
STAFFORD.—Alderman C. W. Miller, Councillor G. Owen.
STALYBRIDGE.—Alderman Potts, Councillor Britnor.
ST. HELENS.—Alderman T. Hamblett, J.P., Dr. Frank Hauxwell.
STOKE-UPON-TRENT.—
STRET福德.—Councillor J. W. Dorran, J.P., Dr. E. H. Walker (Executive).
SUNDERLAND.—Dr. I. W. Modlin, Councillor J. S. Pickering.
TOTTENHAM.—Chairman Health Committee, Medical Officer of Health.
WAKEFIELD.—Alderman R. G. L. Anderson, Mr. E. Dickenson.
WALLASEY.—Dr. T. W. Naylor Barlow.
WALSALL.—Alderman Henry Hucker, J.P., Dr. J. A. M. Clark.
WESTMINSTER.—
WIDNES.—Alderman D. Lewis, J.P., Councillor T. Smith.
WOLVERHAMPTON.—Dr. R. H. H. Jolly.
WREXHAM.—
YORK.—

CONSTITUTION OF THE SOCIETY.

1. **NAME.**—The Society shall be called the NATIONAL SMOKE ABATEMENT SOCIETY.

2. **OBJECTS.**—The Society shall be concerned with the prevention of air pollution generally, and in particular, that arising from coal smoke.

The objects of the Society shall be :—

- (a) To create an informed public opinion on the evils of air pollution.
- (b) To inquire into, and if thought advisable, assist investigations directed towards the abolition of smoke, whether industrial or domestic.
- (c) To take steps to popularise the use of smokeless methods of heat and power production.
- (d) To promote and support legislation for preventing the pollution of the atmosphere.

3. **MEMBERSHIP.**—The Society shall consist of :—

- (a) Life Members.
- (b) Members.
- (c) Associates.
- (d) Affiliated Members.

Life Members.—A donation of not less than twenty-five guineas paid in one amount by any individual, shall constitute the donor a member for life.

Members.—An Annual Subscription of not less than half a guinea in the case of an individual, or one guinea in the case of a commercial firm, shall constitute the subscriber a member. A commercial firm registered as a member shall be entitled to nominate a representative to exercise the privileges of membership as regards attendance at meetings, voting, etc.

Associates.—An Annual Subscription of not less than five shillings shall constitute that subscriber an Associate.

Affiliated Members.—The payment of not less than one guinea by any Local Authority, Society or Institution, shall constitute the subscribing body an Affiliated Member. The Affiliated Member shall be entitled to appoint two representatives to the Council of the Society, who shall receive the privileges of full membership of the Society.

4. **PRIVILEGES OF MEMBERSHIP.**—The privileges of membership shall include :—

- (a) Advice and assistance in questions relating to smoke anatement and fuel economy, as far as the circumstances of the Society will permit.
- (b) Free admission to lectures arranged by the Society.
- (c) The right to receive free of cost, the general publications of the Society as they appear, including the Journal of the Society. Associates shall not, however, receive the Journal and such other literature as may be decided upon from time to time.

5. **THE COUNCIL.**—The Council of the Society shall consist of the Officers, the members of the Executive Committee, two representatives from each Affiliated Member, together with not more than thirty members to be elected annually at the General Meeting.

The business of the Council shall be to direct the policy of the Society in general and to receive any periodical reports from the Executive or other committee.

The Council shall meet at least twice a year, of which at least one meeting shall take place in London.

6. **THE EXECUTIVE COMMITTEE.**—The Executive Committee shall consist of the Officers and not less than twelve members or representatives of Affiliated members, who shall be elected annually at the General Meeting of the Society. The Executive Committee shall have power to appoint sub-committees, and to co-opt additional members. Five shall form a quorum.

The Committee shall meet as required, and the place of meeting shall be the central offices of the Society, or other place at the discretion of the Committee.

The business of the Committee shall be to manage the affairs of the Society.

7. **OFFICERS.**—The Officers of the Society shall be President, Vice-President and Honorary Treasurer, to be elected annually. The Chairman of the Committee and of the Council, shall also be Officers, but shall be elected by their respective Committees.

8. **GENERAL MEETING.**—The General Meeting of the Society shall be held annually at which shall be presented the Annual Report and the Audited Financial Statement, and at which the Officers, the Council and the Executive Committee for the following year shall be elected. Other general meetings shall be held on the requisition of the Council or Executive Committee, or of 20 members of the Society. One month's notice shall be given of all General Meetings.

9. ALTERATION TO CONSTITUTION.—No change shall be made in the constitution of the Society, except by a two-thirds majority of the members present and voting at the Annual Meeting or at a Meeting called specially for the purpose. A notice in writing of any resolution to be submitted for this purpose must be sent to all members of the Society at least a fortnight before the Annual or Special General Meeting.

10. ACCOUNTS.—Accounts shall be kept of all moneys received and expended by the Society, and once at least every year the accounts of the Society shall be examined and the correctness thereof certified by a qualified auditor.

11. BRANCHES.—Branches of the Society shall be constituted, as far as possible, in the town or districts of the United Kingdom, to deal with local smoke abatement and air pollution problems. Branches shall settle their own constitution and terms of membership, but shall pay an affiliation fee of at least sixpence for every individual member and of two shillings and sixpence for every firm affiliated to the National Society, except in the case of members who are also members of the National Society. Members of the Branches who are not also members of the National Society shall be entitled to attend the General and other meetings of the Society, but shall not be entitled to vote thereat. The Branch shall, however, appoint two delegates to the Council of the National Society and to the Annual General Meeting, who shall have full voting powers.

12. JOURNAL AND LITERATURE.—A copy of each issue of the Journal of the Society, together with all other current general literature shall be sent free to each member and delegate from each Affiliated member; to the Town Clerk of each affiliated Local Authority, and to the Secretary of each affiliated Society or Institution.

13. INTERPRETATION OF CONSTITUTION.—The interpretation of these rules together with any question on which the rules are silent shall be decided by the Executive Committee until the next Annual General Meeting.

FIRST ANNUAL REPORT

for the year ended June 30th, 1930.

GENERAL REVIEW.—It is impossible to indicate in what respects our atmosphere has improved in the course of a single year, but definite and satisfactory progress has been made in ways which must, in the aggregate, lead to appreciably cleaner air.

It is unfortunate that the present industrial depression should, in some quarters, diminish sympathy with the movement, and that the shallow-minded should associate clean air with empty factories rather than with efficient factories. The statement "What we want is more smoke" is not only obviously stupid and fallacious, but is mischievous.

Progress is being made with the national electrical development scheme, which by giving a cheaper and wider distribution of electricity should do much in the near future to eliminate smoke. The gas undertakings also generally show a satisfactory increase on output, and the special graded coke for domestic purposes is becoming more popular. It is interesting to note that in Manchester, in which city the Society has recently been much to the fore, the sale of gas coke has risen from 420,000 cwts. in the year ended March, 1929, to 530,000 cwts. in the year ended March, 1930. The scheme for a gas grid in the Sheffield area for the economic utilisation of surplus coke-oven gas promises to be very valuable, and from our point of view it is hoped that it may be undertaken with success.

Much work continues on low temperature carbonisation systems, and while it is difficult to estimate the progress made by many processes it is satisfactory to note that the principal ones, working on a commercial scale, are producing smokeless fuels to an extent never before attained. We would like to point out that our contact with all kinds of consumer shows us that carbonised fuels of all classes, to succeed, must contain no more moisture, and, if possible, less ash, than is found in household coal.

Developments have been made with new types of appliance for aiding smokeless combustion, and in domestic fires and stoves using carbonised fuel or anthracite.

In addition to the activities of the Society outlined below much has been done by the district committees of the local authorities. With Sheffield and Rotherham, the first and sole statutory committee, have now been included other neighbouring authorities, which should greatly strengthen work in the area. The West Riding Committee is organising classes and examinations for firemen; the London Committee has been mainly concerned

with the question of bye-laws and the emission of smoke from railways ; and the Manchester and District Committee has published an excellent booklet on "Smoke Abatement and Fuel Economy in Steam Boiler Practice," as well as having arranged many addresses for manufacturers in the area, and a course of educational lectures in Manchester in conjunction with this organisation. We also welcome the formation of an active voluntary Smoke Abatement Council in Huddersfield. Among other useful activities the Scottish Branch of the Society has held still more successful classes for stokers.

INAUGURATION.—The joint meeting of the Coal Smoke Abatement Society and the Smoke Abatement League of Great Britain, held in Buxton on October 5th last year, was terminated by the formation of the National Smoke Abatement Society through their amalgamation. A complete constitution was drawn up, and the governance of the organisation arranged. It has taken a considerable time, in the midst of other activities, to complete and bring into order the changes and new arrangements incidental to the new association, but all these internal matters are now concluded. The combined list of vice-presidents and elected members of the council, and the representatives appointed by affiliated local authorities and societies, are an indication of a widespread and influential support.

THE JOURNAL.—The first number of the journal made its appearance last November under the title of "Clean Air." It was later discovered that we had inadvertently misappropriated the title used by the National Society of Non-Smokers for their publication. The second issue appeared under the same title, but from now it will be called "The Journal of the National Smoke Abatement Society." The journal is sent to all members, delegates and members of the council, and has a small separate subscription list. It is sent to a number of libraries and institutions, both in this country and in the U.S.A. There is a heavy infantile mortality among journals, but we think that ours will now grow both in vitality and influence. Members and sympathisers, by obtaining new subscribers, and making the journal known, can do much to help what may easily become one of the most formidable weapons in our armoury.

EXHIBITION.—The first activity of the new Society was the co-operation in the Manchester Smoke Abatement Exhibition, which took place under our patronage. This, organised by Provincial Exhibitions, Ltd., and supported by the Manchester "Daily Dispatch," was of great interest and value, and was successful from every point of view.

LECTURES.—Many lectures have been arranged by the Society during the last winter, usually of a general nature, on behalf of local authorities, women citizens' associations, and societies, etc. Audiences appreciate the expositions of the evil of coal smoke, and generally are keenly and critically interested in the methods of smokeless domestic heating. The ensuing discussions, among all classes of the community, form an invaluable means of estimating and realising the requirements, prejudices and general outlook of the housewife.

EXHIBITIONS.—The Society has exhibited at Health, etc., Exhibitions at the following towns, in addition to its stand at the Manchester Exhibition, St. Helens, Keighley, Middleton, Oldham, Wolverhampton and Bolton. There is much scope for enlarging and improving the exhibition material, and the value of these exhibitions will be much increased to us when it is possible to engage assistants to take charge of the stand during the whole of the time.

JOINT MUNICIPAL COMMITTEES.—The London members of the Society have continued their co-operation with the Greater London Joint Smoke Abatement Committee, and in Manchester a joint committee of the Society and the Manchester and District Regional Committee was formed to carry out work which might otherwise overlap. The chief activity of the latter has been to organise a successful series of educational lectures in the Manchester College of Technology last November. The lectures comprised the following subjects, each given by a different lecturer:—Coal and its Combustion, Smoke and Health, Smokeless Fuels, the Abatement of Domestic Smoke, the Abatement of Industrial Smoke, and General Aspects of the Smoke Problem. The average attendance was over thirty. The lecture on "Smoke and Health," by Dr. J. S. Taylor, Assistant Medical Officer of Health for Manchester, has been reprinted in pamphlet form by the Joint Committee. This joint committee has also been in touch with the Coke-oven Managers' Association, which is investigating the possibilities of supplying a fuel suitable for domestic purposes from coke-ovens.

CONFERENCE ON BYE-LAWS.—An important conference was convened by the Society and held at 71, Eccleston Square, London, on May 2nd, 1930, at which Mr. C. J. Allpass, of the London County Council, read a paper on the possibilities of bye-laws under Section 5 of the Public Health (Smoke Abatement) Act, 1926. The conference was attended by members and representatives from local authorities, and full discussion took place on the subject. The meeting closed by the passing of the following resolutions:—

1. That the attention of the Minister of Health be drawn to the limitations imposed under Section 5 of the Act of 1926, and

that he be requested to take steps to enable Local Authorities to obtain a legal decision upon the scope of bye-laws permissible under the Act, and if necessary that he should secure Parliamentary authority for the extension of such powers at the earliest possible date.

2. That the Ministry of Health should be asked to issue model bye-laws under the section for the guidance of those concerned.
3. That this Society urges local authorities to formulate and send to the Minister of Health bye-laws under Section 5 for his approval.
4. That this Society should secure the co-operation of the Royal Institute of British Architects and of the Institution of Civil Engineers in the investigation of the best means of securing that in *all* new buildings, furnaces and fireplaces are constructed so as to prevent smoke arising from the combustible used therein.

In accordance with these resolutions an appropriate letter has been sent to the Minister of Health, and the local authorities have been requested to consider the question. Invitations to the Royal Institute of British Architects and to the Institution of Civil Engineers, on the terms of the resolution, were duly extended, and both organisations have intimated their willingness to co-operate with the Society in the matter.

MANCHESTER BRANCH.—During the year a Manchester, Salford and District Branch of the Society has been formed, with Mrs. Millicent Jast as Chairman and Mr. Charles Gandy as Hon. Secretary. An excellent representative list of vice-presidents has been obtained, as well as a strong committee. The Society extends its best wishes for the success and usefulness of this Branch. It is unfortunately not possible to report similar progress in other districts.

PUBLICATIONS.—The *Journal* is, of course, the most useful and important publication of the Society, but a handbook of general information on Smoke Abatement has been prepared, and should be published by the time that this report is presented. It is intended to publish new editions of this handbook from time to time, and it is hoped that it will be of value to all who are engaged upon or interested in smoke abatement work. “Smoke and Health,” previously mentioned, is an important addition to our literature. Three new pamphlets of attractive appearance, dealing with appeals for support, have been issued, and a group of posters, the first used by the Society, have also been designed. In the second issue of the journal were printed some extracts from Evelyn’s unique “*Fumifugium*,” probably the first pamphlet on smoke abatement. *The*

Times, in discussing this work, recently expressed the hope that some interested society would undertake to publish it in an inexpensive edition. It is hoped that we may be able to do this in the near future.

In various other ways the Society has continued its activities. Many inquiries are received and are answered as far as possible, and information is spread by the help of the Press whenever possible. We are in close contact with a number of individuals and organisations in the United States of America, and receive from them valuable reports of the progress which is being made there. The Society has been represented at various conferences and meetings arranged by other organisations, and the Secretary attended the Congress of the Royal Sanitary Institute in June.

FINANCE.—Reference to the statement of accounts will show that although there has been a welcome increase in subscriptions the expenditure side has also increased considerably, and the expenditure has been actually greater than the income. Preparations are being made for a wider appeal for support, and a representative has been appointed to endeavour to obtain new subscriptions in the London area. Increased support must be obtained if the Society is to continue its activities on the present scale, and is imperative before an extension of the work can be undertaken. A memorandum is to be prepared for the attention of all who are connected with the movement, in which will be given a statement of the methods by which the Society hopes to extend its influence. Tabulated briefly these are :—

1. Increased distribution of leaflets, pamphlets, posters and other material.
2. More attractive and effective exhibition material, and greater opportunities for exhibiting.
3. The preparation of films.
4. Wider and more certain methods of obtaining publicity.
5. To increase the circulation and influence of the Journal.
6. To commence and develop methods of smoke abatement education among the school children and junior organisations.

Such increased activities necessarily mean higher administrative expenses. Still more ambitious schemes have been visualised when sufficient progress has been made, but which are at present still very distant. Following a resolution passed by the Yorkshire Section of the Manchester and District Institution of Gas Engineers, a number of gas undertakings in the Yorkshire area have become subscribers to the Society. It is hoped that such support may be

forthcoming from the other districts, and similarly among electrical and other concerns. Such support is undoubtedly to the mutual advantage of ourselves and the subscribers.

In conclusion, we may say that the Society, the first truly national organisation, is now firmly established as an active, progressive, and increasingly influential body, which, by securing the goodwill of all classes and interests, has placed itself in a position from which may be conducted onslaughts against the evils of smoke more vigorous than have ever before been possible.

SUBSCRIPTIONS AND DONATIONS

for the year ended June 30th, 1930.

Name:	Town.	Subscrip- tions.			Dona- tions.		
		£	s.	d.	£	s.	d.
Miss W. B. Acworth	London	1	1	0	—		
Affleck & Brown	Manchester	2	2	0	—		
R. E. T. Allen (Rev.)	Manchester	0	10	0	—		
A.M.P.	Derbyshire	—			0	10	6
Anglo-American Oil Co.		4	4	0	—		
Anonymous	Manchester	—			20	0	0
Ashton Brothers	Manchester	2	2	0	—		
Ashton, Miss M.	Manchester	1	1	0	—		
Ashton, Hoare & Co.	Manchester	1	1	0	—		
Atkinson, Mrs.	London	25	0	0	—		
Barclay & Co.	Manchester	1	1	0	—		
Barker, K.	Manchester	0	10	0	—		
Barker, S.	Manchester	0	10	0	—		
Barlow, Miss A. E. F.	Bolton	0	10	0	—		
Barlow & Jones	Manchester	2	2	0	—		
Barnoldswick Gas Committee ...		1	10	0	—		
Baxendale & Co.	Manchester	2	2	0	—		
E. Beard	Manchester	1	1	0	—		
Beckwith, J.	London	1	1	0	—		
Bell-White, J.	London	1	1	0	—		
Bennett, Ald. A.	Warrington	1	1	0	—		
Bennett, Dr. J.	Warrington	0	10	6	—		
Bibby, J. & Sons	Liverpool	5	0	0	—		
Bibby, H. P.	Birkenhead	2	0	0	—		
Bracey, Dr. H. (1929)	Birmingham	0	10	0	—		
„ (1930)		0	10	6	—		
Bristow, Col. W. A.	London	5	5	0	—		
British Commercial Gas Associa- tion	London	—			50	0	0
British Dental Association	London	1	1	0	—		
Brownlie, D.	London	0	10	6	—		
Buttle, Mrs. E.	Manchester	0	10	6	—		
Cadbury Brothers	Birmingham	2	2	0	—		
Calverley & Horsforth District Gas Co.	Leeds.....	1	0	0	—		
Carr, J.D.	Manchester	1	0	0	—		
Carter, Sir E. Bonham	London	1	18	0	—		
Caulfield, Mrs. R. M.	London	0	10	0	—		
City of London Electric Light Company	London	2	2	0	—		
Claye, Dr. E.	Stockport	0	10	6	—		
Clayton, R. H.	Manchester	2	2	0	—		
Clinch, H. G.	West Ham	0	10	6	—		
Cheetham, H.	Manchester	0	10	6	—		
Cleckheaton Gas Committee ...	Cleckheaton	2	2	0	—		
Clegg, E.	Bradford	0	10	6	—		
Cohen, J. B.	Leeds.....	0	10	6	—		
Constable & Co.....	London	—			0	10	6
Cooper, Miss I.	Manchester	0	10	6	—		

Name.	Town	Subscription.			Donation.		
		£	s.	d.	£	s.	d.
Cowley, Miss I. N.	Hale	0	10	0	—	—	—
Croydon Gas Co.	Croydon	5	5	0	—	—	—
Davey, A. C.	London	0	10	6	—	—	—
David, R. P.	Leeds.....	0	10	6	—	—	—
Daniels, S. R.	Oxford	0	10	6	—	—	—
Direct Coal Trading Co.	Sheffield	0	10	6	—	—	—
Duguid, Mr. and Mrs.	Lymm	1	1	0	—	—	—
Elland Gas Co.	Elland	1	10	0	—	—	—
Fitton, F. A.	Manchester	0	10	6	—	—	—
Fitzgerald, Miss M.	Manchester	0	10	6	—	—	—
Flugal, Mrs.	London	0	10	0	—	—	—
Fox, F.	Cheshire	0	10	6	—	—	—
Fothergill & Harvey	Manchester	1	1	0	—	—	—
Gandy, C.	Manchester	4	4	0	—	—	—
Gandy, H.	Cumberland	0	10	6	—	—	—
Geldard, N.	Ilkley	0	10	6	—	—	—
General Electric Co.	London	5	5	0	—	—	—
George, W. H.	Ashton	0	10	6	—	—	—
Godbert, C. W.	Manchester	1	1	0	—	—	—
Goodenough, Sir Francis	London	2	2	0	—	—	—
Graham, J. W.	Cambridge	2	2	0	—	—	—
Hague, J. Haughton.....	Oldham	1	1	0	—	—	—
Hall, Higham & Co.	Manchester	1	1	0	—	—	—
Hancock, A.	Manchester	0	10	6	—	—	—
Herbert, A. Ltd.	Coventry	1	1	0	—	—	—
Higgs, Mrs.....	Oldham	0	10	6	—	—	—
Hoare, A.	London	0	10	0	—	—	—
Hodgson, J. T.	Manchester	0	10	6	—	—	—
Horobin, I. M.	London	5	5	0	—	—	—
Horsfall, I. C.	Berks.....	1	1	0	—	—	—
Hunter, T. J.	Manchester	0	10	6	—	—	—
Huntley, C. Gordon	Manchester	0	10	6	—	—	—
Hyde, Mrs.	London	1	0	0	—	—	—
Hyde Corporation	Hyde	—	—	—	1	1	0
Illingworth Carbonization Co. Ltd.	Manchester	25	0	0	—	—	—
Illingworth, S. E.	Harrogate	9	0	0	—	—	—
Institution of Heating and Ventilating Engineers	London	3	3	0	—	—	—
Keeley, R.	Manchester	1	1	0	—	—	—
Lamb, Mrs. H. C.	Manchester	1	1	0	—	—	—
Lane, Sir W. Arbuthnot	London	1	1	0	—	—	—
Lancashire & Cheshire Gas Exhibit. Committee	Manchester	2	2	0	—	—	—
Langford, A. S.	Manchester	0	10	6	—	—	—
Lapage, Dr. C. P.	Manchester	0	10	6	—	—	—
Lee, Miss D. C.	Oxford	0	10	6	—	—	—
Lees, Dame	Oldham	5	0	0	—	—	—
Lees, Miss M.	Oldham	1	1	0	—	—	—
Liptak Furnace Arches Ltd. ...	London	1	1	0	—	—	—
Liverpool Gas Co.	Liverpool	2	2	0	—	—	—
Livesey, R.....	Heywood	0	10	6	—	—	—
London Coke Committee	London	1	1	0	—	—	—
Longley, J. A.	London	1	1	0	—	—	—

Name.	Town.	Subscription.			Donation.		
		£	s.	d.	£	s.	d.
Low Temperature Carbonisation	London	50	0	0	—		
Ludlam, J. E.	Manchester	0	10	6	—		
Lytton, Hon. Neville S.	London	1	1	0	—		
Local Authority of.....	Bingley	1	1	0	—		
"	Bermondsey	1	1	0	—		
"	Birkenhead	2	2	0	—		
"	Bootle	5	5	0	—		
"	Brighton	1	1	0	—		
"	Bristol	5	5	0	—		
"	Burnley.....	2	2	0	—		
"	Buxton	1	1	0	—		
"	Cardiff	1	1	0	—		
"	Chester	1	1	0	—		
"	Darlington	1	1	0	—		
"	Doncaster	1	1	0	—		
"	Dundee	1	1	0	—		
Local Authority of.....	Ealing	1	1	0	—		
"	Eccles	2	2	0	—		
"	Farnworth	2	2	0	—		
"	Harrogate	2	2	0	—		
"	Horwich	1	1	0	—		
"	Huddersfield	2	2	0	—		
"	Hull	1	1	0	—		
"	Irlam	1	1	0	—		
"	Leeds.....	10	10	0	—		
"	Leicester	10	10	0	—		
"	Lincoln	2	2	0	—		
"	Liverpool	1	1	0	—		
"	Manchester (Gas) ...	2	2	0	—		
"	Manchester (Health)	26	5	0	—		
"	Manchester (Elec.) ...	2	2	0	—		
"	Mansfield	1	1	0	—		
"	Mirfield	1	1	0	—		
"	Newcastle-upon-Tyne	5	5	0	—		
"	Nottingham	5	5	0	—		
"	Oldham	1	1	0	—		
"	Radcliffe	1	1	0	—		
"	Richmond.....	1	1	0	—		
"	Rochdale	3	3	0	—		
"	Royton	1	1	0	—		
"	Salford	2	2	0	—		
"	Salford (Health)	1	1	0	—		
"	Salford (Gas)	2	2	0	—		
"	Salford (Gas, 1929) ...	2	2	0	—		
"	Sheffield, Rotherham and District Joint Committee	25	0	0	—		
"	Smethwick	2	2	0	—		
"	Smethwick (Gas) ...	2	2	0	—		
"	St. Helens.....	1	1	0	—		
"	Stafford.....	1	1	0	—		
"	Stalybridge	1	1	0	—		
"	Stretford	2	2	0	—		
"	Stoke	5	5	0	—		

Name.	Town.	Subscription.			Donation.		
		£	s.	d.	£	s.	d.
Local Authority of.....	Sunderland	5	5	0	—		
” ”	Tottenham	1	1	0	—		
” ”	Wallasey	2	12	6	—		
” ”	Walsall	1	1	0	—		
” ”	Warrington	2	2	0	—		
” ”	Widnes	1	1	0	—		
” ”	Wolverhampton	1	1	0	—		
” ”	Worcester	1	1	0	—		
” ”	York	0	10	6	—		
Maclaurin	Stirling	1	0	0	—		
Martland, Dr. J. P.	Oldham	1	1	0	—		
Mather, L. E.	Manchester	2	2	0	—		
Mattingley, Mrs. E.	London	5	5	0	—		
Melland, W.	Manchester	10	0	0	—		
Melland, Mrs. W.	Manchester	1	1	0	—		
Moore, S. H.	Chester	0	10	6	—		
Moore, S. H. (1929) .....	.....	0	10	6	—		
Micklethwaite, W. H. & Co. Ltd.	Rotherham	0	10	6	—		
National Radiator Co.	Hull	5	5	0	—		
Newton, Lord	London	1	1	0	—		
Northbourne, Lord	London	0	10	0	—		
Payne, Mrs. A. L.	London	1	0	0	—		
Pearson, Dr. S. Vere.....	Norfolk	0	10	0	—		
Pilcher, G.	London	1	1	0	—		
Powell, Major General, S. H. ...	London	1	1	0	—		
Power Gas Corporation	Stockton-on-Tees.....	1	1	0	—		
Preston Gas Co.....	Preston	—			1	1	0
Provincial Exhibitions Ltd. ...	.....	—			100	0	0
Reed, H. A.	Manchester	0	10	6	—		
Refuge Assurance Co.	Manchester	5	5	0	—		
Richardson, Major	London	2	2	0	—		
Richmond Gas Stove Co.....	Richmond.....	2	2	0	—		
Ripon Gas Committee	Ripon	1	0	0	—		
Robertson, R.	Bristol	0	10	6	—		
Robinson, Dr. J.	Stretford	0	10	6	—		
Sanger, Mrs. A. D.	London	1	0	0	—		
Sanitary Inspectors' Association	London	1	1	0	—		
Saunders & Taylor	Manchester	1	1	0	—		
Scott, C. P.....	Manchester	1	1	0	—		
Shaw, Mrs. Bernard	London	3	3	0	—		
Sheffield Gas Co.	Sheffield	1	1	0	—		
Shell Mex Ltd.	London	2	2	0	—		
Siedler, Dr. P.	Germany	0	10	6	—		
Simon, E. D.	Manchester	5	0	0	—		
Simon, Son & Co.	Manchester	2	2	0	—		
Simpson & Godlee.....	Manchester	1	1	0	—		
Smith, H. Teeling	London	1	1	0	—		
Southern, G. W.	Sheffield	0	10	6	—		
Steinthal & Co.	Manchester	2	2	0	—		
Scottish Branch.....	Glasgow	2	2	0	—		
Stevenson, Canon J. M.	Liverpool	1	1	0	—		
Scottish Branch.....	Glasgow	2	2	0	—		
Stuart, H. T. R.	Hants	0	10	6	—		
Swales, J. G. & Co.	Manchester	2	2	0	—		

Name.	Town.	Subscription.			Donation.		
		£	s.	d.	£	s.	d.
Tanner, A. E.	London	2	2	0	—		
Tootal, Broadhurst, Lee & Co..	Manchester	3	3	0	—		
Trezise, W.	Wolverhampton	0	10	0	—		
Trier, J. Newton	London	1	1	0	—		
Des Voeux, Dr. H. A.	Hants.	2	2	0	—		
Watson, J.	Manchester	—			5	0	0
Waterhouse, Mrs.	Bakewell	2	2	0	—		
Watts, S. & J.	Manchester	1	1	0	—		
West's Gas Improvements Co..	Manchester	5	5	0	—		
Whyte, Mrs. J. E.	Finchampstead	1	0	0	—		
Woodall-Duckham & Co.	London	10	0	0	—		
York Gas Co.	York	10	0	0	—		
Young, Mrs. T. M.	Manchester	0	10	6	—		
Subscriptions and Donations under 10s.		23	13	6	0	5	0

£534 15 0 £178 8 0

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N.B.—1929 figures relate to S.A.L.G.B. only.

September 15th, 1930.

N.B.—1929 figures relate to S.A.L.G.B. only.

MEMBERSHIP FORMS.

INDIVIDUAL.

*To the General Secretary, National Smoke Abatement Society,
23, King Street, Manchester.*

Kindly admit the undersigned as a Member/an Associate of
the Society. A first Annual Subscription is enclosed, to date
from.....193.....

Signed

Address in full

.....

.....

Minimum Subscription for members
(including Journal) 10/6.
Associate Subscription 5/-
Life Membership Subscription £25.

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(See Constitution, Sections 3 and 4).

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Kindly admit the undersigned as a member of the Society.
A first Annual Subscription of £ : : is enclosed,
to date from.....193.....

Signed

On behalf of.....

Address

Representative(s) appointed

.....

Address Communications to { Firm
Representative.

Minimum Subscription, One Guinea.

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*To the General Secretary, National Smoke Abatement Society,
23, King Street, Manchester.*

I enclose £..... as a donation to the Society, and
would be pleased to receive notices, literature, etc., from time
to time. (Delete latter clause if desired).

Signed

Address

.....

.....

To be forwarded to the Society.

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To the Manager,

The

Please pay the sum of £ . : : immediately
and on the same date in each succeeding year until further notice,
to the credit of the NATIONAL SMOKE ABATEMENT SOCIETY, with
the Manchester and County Bank Ltd., 55, King Street, Manchester.

Signed

Address

.....

.....

Date.....193.....

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“I give free of duty to the National Smoke Abatement Society
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applied to the general purposes of the said Society, and I declare
that the receipt of the Treasurer for the time being shall be a
sufficient discharge to my Executors for the same.”

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C 32

**The National
Smoke Abatement
Society**

**SECOND
ANNUAL
REPORT
1931**

SECOND ANNUAL REPORT

of the

National Smoke Abatement Society

1931

23 KING STREET
MANCHESTER

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WREXHAM.—

YORK.—

CONSTITUTION OF THE SOCIETY.

1. **NAME.**—The Society shall be called the NATIONAL SMOKE ABATEMENT SOCIETY.

2. **OBJECTS.**—The Society shall be concerned with the prevention of air pollution generally, and in particular, that arising from coal smoke.

The objects of the Society shall be :—

- (a) To create an informed public opinion on the evils of air pollution.
- (b) To inquire into, and if thought advisable, assist investigations directed towards the abolition of smoke, whether industrial or domestic.
- (c) To take steps to popularize the use of smokeless methods of heat and power production.
- (d) To promote and support legislation for preventing the pollution of the atmosphere.

3. **MEMBERSHIP.**—The Society shall consist of :—

- (a) Life Members.
- (b) Members.
- (c) Associates.
- (d) Affiliated Members.

Life Members.—A donation of not less than twenty-five guineas paid in one amount by any individual, shall constitute the donor a member for life.

Members.—An Annual Subscription of not less than half a guinea in the case of an individual, or one guinea in the case of a commercial firm, shall constitute the subscriber a member. A commercial firm registered as a member shall be entitled to nominate a representative to exercise the privileges of membership as regards attendance at meetings, voting, etc.

Associates.—An Annual Subscription of not less than five shillings shall constitute that subscriber an Associate.

Affiliated Members.—The payment of not less than one guinea by any Local Authority, Society or Institution, shall constitute the subscribing body an Affiliated Member. The affiliated Member shall be entitled to appoint two representatives to the Council of the Society, who shall receive the privileges of full membership of the Society.

4. **PRIVILEGES OF MEMBERSHIP.**—The privileges of membership shall include :—

- (a) Advice and assistance in questions relating to smoke abatement and fuel economy as far as the circumstances of the Society will permit.
- (b) Free admission to lectures arranged by the Society.
- (c) The right to receive free of cost, the general publications of the Society as they appear, including the Journal of the Society. Associates shall not, however, receive the Journal and such other literature as may be decided upon from time to time.

5. **THE COUNCIL.**—The Council of the Society shall consist of the Officers, the members of the Executive Committee, two representatives from each Affiliated Member, together with not more than thirty members to be elected annually at the General Meeting.

The business of the Council shall be to direct the policy of the Society in general and to receive any periodical reports from the Executive or other committee.

The Council shall meet at least twice a year, of which at least one meeting shall take place in London.

6. **THE EXECUTIVE COMMITTEE.**—The Executive Committee shall consist of the Officers and not less than twelve members or representatives of Affiliated members, who shall be elected annually at the General Meeting of the Society. The Executive Committee shall have power to appoint sub-committees, and to co-opt additional members. Five shall form a quorum.

The Committee shall meet as required, and the place of meeting shall be at the central offices of the Society, or other place at the discretion of the Committee.

The business of the Committee shall be to manage the affairs of the Society.

7. **OFFICERS.**—The Officers of the Society shall be President, Vice-President and Honorary Treasurer, to be elected annually. The Chairman of the Committee and of the Council, shall also be Officers, but shall be elected by their respective Committees.

8.—**GENERAL MEETING.**—The General Meeting of the Society shall be held annually at which shall be presented the Annual Report and the Audited Financial Statement, and at which the Officers, the Council and the Executive Committee for the following year shall be elected. Other general meetings shall be held on the requisition of the Council or Executive Committee, or of 20 members of the Society. One month's notice shall be given of all General Meetings.

9. **ALTERATION TO CONSTITUTION.**—No change shall be made in the constitution of the Society, except by a two-thirds majority of the members present and voting at the Annual Meeting or at a Meeting called specially for the purpose. A notice in writing of any resolution to be submitted for this purpose must be sent to all members of the Society at least a fortnight before the Annual or Special General Meeting.

10. **ACCOUNTS.**—Accounts shall be kept of all moneys received and expended by the Society, and once at least every year the accounts of the Society shall be examined and the correctness thereof certified by a qualified auditor.

11. **BRANCHES.**—Branches of the Society shall be constituted, as far as possible, in the town or districts of the United Kingdom, to deal with local smoke abatement and air pollution problems. Branches shall settle their own constitution and terms of membership, but shall pay an affiliation fee of at least sixpence for every individual member and of two shillings and sixpence for every firm affiliated to the National Society, except in the case of members who are also members of the National Society. Members of the Branches who are not also members of the National Society shall be entitled to attend the General and other meetings of the Society, but shall not be entitled to vote thereat. The Branch shall, however, appoint two delegates to the Council of the National Society and to the Annual General Meeting, who shall have full voting powers.

12. **JOURNAL AND LITERATURE.**—A copy of each issue of the Journal of the Society, together with all other current general literature shall be sent free to each member and delegate from each Affiliated member ; to the Town Clerk of each affiliated Local Authority, and to the Secretary of each affiliated Society or Institution.

13. **INTERPRETATION OF CONSTITUTION.**—The interpretation of these rules together with any question on which the rules are silent shall be decided by the Executive Committee until the next Annual General Meeting.

SECOND ANNUAL REPORT

for the year ended June 30th, 1931.

General Review.—A period of acute industrial depression, national anxiety and increasing demands for economy is not favourable to the prosecution of a reform of the nature of that with which we are concerned. The continued insistence upon smoke abatement needs, however, no apology, for the very basis of the campaign is for economy itself—through the scientific and efficient utilization of our fuel supplies and the abolition of the tremendous waste occasioned by the wanton emission of smoke. Indeed, if smoke could be abolished from this country in a single year, the benefit received by the nation would be equal to a one-third reduction of income tax.

No event of outstanding importance has taken place during the year under review, but a gradually increasing interest in the problem, exhibited in various ways, is discernible. Smoke abatement is discussed more and more in the press, at conferences and at the meetings of learned societies, and, although such discussion may not lead to any definite results, it is indirectly most valuable, and is forming that public opinion against smoke which must be built up before the reform can be realized.

A debate on smoke abatement took place in the House of Lords in April as a result of a question asking what measures were being taken by the Government to deal with the problem. Pollution from domestic fires was strongly condemned, and further action against this source was urged. The suggestion was made that there be a slight remission of rent in state-aided houses where there are no open fires, or similarly, a remission of income tax under Schedule "A." Several questions concerning legislation have been asked in the House of Commons during the year.

Papers on industrial and domestic smoke abatement were read at the Sanitary Inspectors' Conference last year, and two papers on the subject were presented to the Royal Sanitary Institute's Glasgow Congress. A strong resolution was passed at the Congress of the Women's Co-operative Guilds, urging that steps be taken to increase the supply of smokeless fuel, and calling upon local authorities to carry out in a more vigorous manner the duties for which they are responsible under the smoke abatement legislation.

The annual report of the Society's Scottish Branch shows a further year of increasing activity and the successful completion of a further course of training for stokers. The Branch's annual meeting was held in Dundee, at which papers were read on: "Coal Smoke and Cancer," by Dr. Elizabeth Mudie; "The Effect of

Smoke upon Health," by Bailie Violet M. Craig Robertson; "Proportions of Domestic and Industrial Smoke in City Atmosphere," by F. W. Harris; "The Final Solution of the Smoke Problem," by ex-Bailie W. Brownhill Smith; and "Control of Industrial Smoke," by Thomas M. Ashford.

The various regional and other joint smoke abatement committees continue with their activities, the chief feature of interest being the action of the Manchester and District Regional Smoke Abatement Committee in drawing up and discussing a scheme for the formation of a joint statutory committee for the South-east Lancashire area. The scheme, which is estimated to cost £13,500 a year and which would divide the area into twenty inspectorial districts, is at present being considered by the local authorities concerned.

The Leicester Conference.—The second annual conference of the new Society was held, by the kind invitation of the Corporation, in Leicester, on September 26th, 27th and 28th, 1930, and had the best attendance of any of the annual week-end conferences. The papers read were as follows: "Atmospheric Pollution as affecting Visibility" and "Visibility as affecting Aviation," by Messrs. M. G. Bennett and F. Entwistle, of the Meteorological Office, the Air Ministry; "Fuel Research and Smoke Abatement," by Dr. Margaret Fishenden; and a discussion upon the memorandum on the "Present Position with Respect to Smoke Abatement," being a report to the Sheffield Smoke Abatement Research Committee, by Messrs. F. J. Bailey and E. C. Evans. A successful and well-attended public meeting, at which the Lord Mayor welcomed the conference, was held on the Friday evening, and on the afternoon of Saturday, a motor tour, at the invitation of the Leicester Public Health Committee, was made, visits being paid to the Charnwood Forest, the Leicester Disabled Warriors' Homes and the Leicester Fire Station. Arrangements had been made for press publicity services, and a gratifying number of reports of the meetings were published throughout the country.

Liverpool Conference.—An invitation from the Liverpool Corporation for the Society to hold its 1931 Conference in that city was received and accepted by the Executive Committee. Arrangements for the conference were made, in which the Liverpool authorities have very kindly helped to a considerable extent.

The Society's Membership.—The Society's efforts during the last year have been largely directed towards the essential task of increasing membership and income. We have, during the past two years, consolidated our position, and this is the time for us to expand and increase our usefulness. Unfortunately, this coincides with a period of financial stringency which is severely affecting

organizations of all kinds. In the circumstances, therefore, we have been fortunate in our endeavours. During the autumn and winter a paid canvasser in the London area secured many new members, mainly from among commercial and industrial undertakings, and for the current year there has been an increase in members of 79, and a net additional subscription of £127. The full benefit of this has not yet been felt owing to the expenses incurred. Further, there has been the loss of a few relatively large subscriptions. We regret that it has not been possible to continue our connection with the canvasser, Captain Wall, to whom we are indebted for his excellent services.

The National Gas Council recently circularized its members with an appeal for them to support the Society by subscribing to its funds. The results of this appeal, for which we are very grateful to the National Gas Council, and to whom a vote of thanks was tendered at the last meeting of the Society's Council, are not seen in the period covered by the present Report and Financial Statement, but it may be stated that they promise to be of considerable value.

Very welcome support has been received from certain sections of the electrical industry, although it is regretted that this industry, as a whole, in spite of the fact that the use of electricity is inextricably bound up with smoke abatement, and is advocated by the Society as strongly as it advocates the use of any other medium, hardly seems interested in the movement and its potential importance.

Honorary Advisers.—With a view to making available to the Society the authoritative opinions on various subjects with which smoke abatement is concerned, the Executive Committee has extended invitations to a number of experts to act as "Honorary Advisers" with respect to their own particular subjects. The following have accepted the invitation:—

Atmospheric Pollution : Sir Napier Shaw and Dr. J. S. Owens.

Legislation : Mr. Randolph Glen.

Health : Sir Leonard Hill, Professor P. S. Lelean, Dr. F. N. K. Menzies.

Steam Raising Processes : Messrs. J. B. Jones, E. W. L. Nicol, H. L. Pirie.

Metallurgical Processes : Mr. E. C. Evans.

Domestic Heating : Dr. Margaret Fishenden.

Gas Industry : Sir Francis Goodenough, Dr. E. W. Smith.

Electrical Industry : Mr. A. P. M. Fleming, Lt.-Col. W. A. Vignoles.

Low Temperature Carbonization :

An invitation with respect to the last named could not be accepted, but will be again extended.

“Journal.”—The publication of the “Journal” during the past year has not been without difficulty, due to causes outside the Society’s hands, and the issue of certain numbers was delayed. It is hoped that publication will be regular in the future. Articles and reports covering a wide range of subjects and contributed by qualified writers have been published, and we trust that the “Journal” is proving to be of real value to all who are interested in the work. The Editorial Committee will be glad to receive contributions of general interest, and in particular wish for articles concerning new developments.

Section Five of the 1926 Act.—As a result of the resolution passed at the Council Meeting in May, 1930, the Royal Institute of British Architects and the Institution of Civil Engineers were invited to appoint representatives to discuss with the Society the problems associated with Section Five of the Public Health (Smoke Abatement) Act, 1926. As a result of this joint meeting a resolution was passed in the following terms :—

“That in view of the opinions expressed by legal experts, representatives of local authorities, and in the answers given by the Minister of Health in Parliament, that, as framed, Section Five of the Public Health (Smoke Abatement) Act, 1926, is unworkable inasmuch as it is impracticable to prepare satisfactory bye-laws requiring the provision in new buildings other than private dwelling houses of such arrangements for heating or cooking as are calculated to prevent or reduce the emission of smoke, this Conference RESOLVES :—

That the Royal Institute of British Architects and the Institution of Civil Engineers be requested to consider and report for the guidance of this Society, and of the Regional Smoke Abatement Committees and local authorities, concerned in the administration of the Public Health Acts, whether Section Five of the Act should be so amended as to enable bye-laws to be made to make it compulsory that in all new buildings other than private dwelling houses, the heating and cooking arrangements should be smokeless in operation, and that if any open fires are installed they shall be smokeless in operation.”

A communication from the Royal Institute of British Architects has intimated that the matter has been considered by its Council, which is in agreement with the proposal for the amendment of the Act. The Institution of Civil Engineers decided, however, that no action should be taken.

Scotland.—At the request of the Scottish Branch of the Society the Executive Committee passed a resolution which was forwarded to the Secretary of State for Scotland urging that steps be taken to promote legislation for Scotland on the lines of the Public Health (Smoke Abatement) Act, 1926, which applies only to England and Wales. Similar resolutions were passed and communicated to the Secretary of State by the Scottish Branch and by numerous local authorities in Scotland. As far as is known no action has yet been taken.

Road Traffic Act.—A further resolution was communicated to the Minister of Transport, in which satisfaction was expressed that the emission of smoke from street vehicles had been dealt with in the Road Traffic Act, but which urged the deletion of the word “avoidable” in the Clause reading: “Every motor vehicles shall be so constructed that no avoidable smoke or visible vapour is emitted therefrom,” as otherwise the Clause would be rendered largely inoperative. A reply stated that the regulations had already come into operation, and that in the opinion of the Minister the suggested amendment would be impracticable.

National Certificates for Boilerhouse Employees.—The Society was invited to appoint representatives to a joint committee of the Institute of Fuel and the Association of Technical Institutions, which is being formed to ascertain whether any practical steps can be taken so as to issue national certificates in some form to those boilerhouse employees who by education and/or experience have proved to be competent in their occupation. The Executive Committee has accepted the invitation and representatives have been appointed.

Meetings.—In addition to the meetings previously mentioned and to the numerous lectures and addresses given by the officers and other members of the Society, the course on Smoke Abatement organized by the Royal Sanitary Institute was opened by an address by Sir Lawrence Chubb. A paper, entitled, “The Smoke Problem: A consideration of some of its economic aspects and the difficulties of its solution,” was read by your Secretary before the members of the Institute of Fuel in London, and also to the members of the Birmingham section of the Institute. The paper was well reported and discussed in the technical press.

Your Chairman and Secretary received, and gladly accepted, invitations to speak at a public meeting held in conjunction with a sectional Conference of the British Commercial Gas Association in Halifax.

Society of Medical Officers of Health.—The Council of this Society has very kindly undertaken to receive a deputation from our Society, the objects of which are to endeavour to secure

greater interest from public health quarters and possibly greater support from the municipalities. It is hoped that this will take place in October next.

Exhibits.—A large amount of time has been expended in making new exhibits and renovating old ones. As a result there is now available a wide selection of exhibition material which, in addition to being quite attractive in appearance, can be packed and transported without damage or trouble. It is hoped to continue increasing the number and variety of exhibits so that it will be possible to participate, with beneficial results, in a larger number of health and other exhibitions. A list of exhibits available has been prepared and may be obtained on application.

Exhibitions.—During the past year the Society has taken part in exhibitions at Lancaster, Shipley, Spenborough, Heywood, Bebington, Birkenhead and Dudley.

The 1932 Conference.—An invitation has been received from the Newcastle-upon-Tyne Corporation for the Society to hold its Annual Conference for 1932 in that city. The Executive Committee has gratefully accepted this invitation.

WILL MELLAND, *Chairman.*

ARNOLD MARSH, *General Secretary.*

SUBSCRIPTIONS AND DONATIONS

for the year ended June 30th, 1931.

Name.	Town.	Subscrip- tions.	Donations.
Acworth, A. W.	London	0 10 6	—
Acworth, Miss E. R.	London	1 1 0	—
Affleck & Brown	Manchester	2 2 0	—
Allen, Rev. R. E. T.	Manchester	0 10 0	—
Altrincham Gas Co.		1 1 0	—
Anonymous	Manchester		20 0 0
Arning, A. W.	Manchester	1 1 0	1 9 0
Ashton Brothers	Manchester	2 2 0	—
Ashton, Hoare & Co.	Manchester	1 1 0	—
Ashton, Miss M.	Manchester	1 1 0	—
Atkinson, Mrs.	London	25 0 0	—
Baldwin, Miss M.	Scarborough	0 10 6	—
Barbour Brothers	Manchester	2 2 0	—
Barclay, R. & Co.	Manchester	1 1 0	—
Barlow, Miss A. E.	Bolton	0 10 0	—
Barlow and Jones	Manchester	—	2 2 0
Barlow, Sir Thomas	London	0 10 6	—
Barnoldswick U.D.C. (Gas Dept.)		1 10 0	—
Beard, E.	Manchester	1 1 0	—
Beautiful Oldham Society	Oldham	1 1 0	—
Beckwith, J.	London	1 1 0	—
Bell-White, Capt. J.	London	1 1 0	—
Bennett, Alderman A.	Warrington	1 1 0	—
Bibby, H. P.	Birkenhead	2 0 0	—
Bibby, J. & Sons	Liverpool	5 0 0	—
Bingley Corporation		1 1 0	—
Birkenhead Corporation		2 2 0	—
Birmingham Corporation		5 5 0	—
Blenkinsop, Miss M.	London	0 10 6	—
Bootle Corporation		5 5 0	—
Bournemouth and District Gas and Water Co.		2 2 0	—
Bray, Geo & Co.	Leeds	1 1 0	—
Brassert, H. A. & Co.	London	1 1 0	—
Bradley & Burch	London	1 1 0	—
Briggs, C. H.	London	0 10 6	—
Brighouse Corporation Gas Department		2 0 0	—
Brighton, Hove & Worthing General Gas Co.		—	2 2 0
Bristol Corporation		5 5 0	—
British Commercial Gas Assoc.	London	—	50 0 0
British Dental Association	London	1 1 0	—
British Electrical Development Association.	London	50 0 0	—
British Gas Light Company	London	2 2 0	—
British Medical Association	London	1 1 0	—
Brownlie, D.	London	0 10 6	—
Burley Corporation		2 2 0	—
Bury, Miss C.	London	0 10 0	—
Bury Corporation		2 2 0	—

Name.	Town.	Subscriptions.			Donations.		
Buxton Corporation		1	1	0	—		
Bythway, Miss A.	Manchester	1	0	0	—		
Cadbury Brothers	Bournville	2	2	0	—		
Calverley & Horsforth District Gas Co.		1	0	0	—		
Cambridge Instrument Co.	London	1	1	0	—		
Cardiff Corporation		1	1	0	—		
Carr, J. D.	Manchester	1	0	0	—		
Carter, Sir E. Bonham	London	1	10	0	—		
Caulfield, Mrs. R. M.	London	0	10	0	—		
Cawthorn, Miss M.	London	0	10	6	—		
Cheetham, Howard	Manchester	0	10	6	—		
Claye, Dr. E.	Stockport	0	10	0	—		
Clayton, R. H.	Manchester	2	2	0	—		
Clegg, E.	Bradford	0	10	6	—		
Clinch, H. G.	West Ham	0	10	6	—		
Cohen, Prof. J. B.	Leeds.	0	10	6	—		
Combustion Control Co.	London	1	1	0	—		
Commercial Gas Co.	London	—			5	5	0
Cooper, Miss I.	Bramhall	0	10	6	—		
Cowley, Mrs. I. M.	Hale	0	10	0	—		
Cowper-Coles, S.	Sunbury-on-Thames	0	10	0	—		
Croydon Gas Company		5	5	0	—		
D. & I. Smokeless Fuels Ltd. ...	London	1	1	0	—		
Daniels, S. R.	Oxford	0	10	6	—		
Darlington Corporation		1	1	0	—		
Detrick Arch Co. Ltd.	London	1	1	0	—		
Doncaster Corporation		1	1	0	—		
Duguid, Mr. and Mrs.	Lymm	1	1	0	—		
Dundee Corporation		1	1	0	—		
Ealing Corporation		1	1	0	—		
East Cowes Gas Company		—			1	1	0
Eccles Corporation		2	2	0	—		
Edmonton U.D.C.		1	1	0	—		
Evans, Mrs. Richardson	Dorking	1	0	0	—		
Falk, Stadelmann & Co.	London	1	1	0	—		
Failsworth U.D.C.		1	1	0	—		
Farnworth U.D.C.		2	2	0	—		
Finsbury Corporation		1	1	0	—		
Flugel, Mrs.	London	0	10	0	—		
Fothergill and Harvey	Littleborough.	1	1	0	—		
Fox, F.	London	0	10	6	—		
Fry, Miss A. R. (1930)	London	1	0	0	—		
Fry, Miss A. R. (1931)	London	1	0	0	—		
Gaddum, H. E.	Altrincham	0	10	0	—		
Gallenkamp & Co.	London	1	0	0	—		
Gandy, Henry	Carbridge	0	10	6	—		
Gas Chambers and Coke Ovens Ltd.	London	1	1	0	—		
Gas, Light and Coke Co.	London	52	10	0	—		
Gladstone, H. N.	London ..	1	1	0	—		
Godalming Gas & Coke Co. ...		1	1	0	—		
Goodenough, Sir Francis	London	2	2	0	—		
Graham, J. W.	Cambridge	1	1	0	—		
Grimes, Miss A.	London	1	1	0	—		

Name.	Town.	Subscriptions.			Donations.		
Guildford Gas Light & Coke Co.		2	2	0	—		
Hague, J. Haughton.....	Oldham	1	1	0	—		
Hampstead Heath Protection Society	London	1	1	0	—		
Hall, Higham & Co.	Manchester	1	1	0	—		
Halifax Corporation Gas Dept.		10	10	0	—		
Hampton Court Gas Co.		1	1	0	—		
Harrogate Corporation		2	2	0	—		
Hasluck, Rev. E. E., (1930) ...	Reading	0	10	6	—		
Hasluck, Rev. E. E. (1931) ...	Reading	0	10	6	—		
Herbert, Alfred Ltd.....	Coventry	—			1	1	0
Herbert, Mrs. N.	Alderley Edge	0	10	6	—		
Herne Bay Gas Company		—			1	1	0
Hessel Gas Company		1	1	0	—		
Heywood Corporation Gas Dept.		1	1	0	—		
Higgs, Mrs. M.	Oldham	0	10	6	—		
Hoare, A.	London	0	10	0	—		
Hodgson, J. T.	Manchester	0	10	6	—		
Holmes, W. C. & Co.	Huddersfield	5	5	0	—		
Horwich U.D.C.		1	1	0	—		
Huddersfield Corporation		2	2	0	—		
Humphrey, Misses	London	1	1	0	—		
Hunter, R. L.	London	1	1	0	—		
Huntley, C. Gordon	Manchester	0	10	6	—		
Hyde, Mrs. Annie	London	1	0	0	—		
Idris, Ltd.	London	2	2	0	—		
Illingworth Carbonization Ltd.	Bradford	2	2	0	—		
Illingworth, S.E.	Harrogate	1	0	0	—		
Ingham, W.	Manchester	0	10	0	—		
International Combustion Ltd.	London	1	1	0	—		
Institution of Heating and Ventilating Engineers	London	3	3	0	—		
Irlam U.D.C.		1	1	0	—		
Jast, Mrs. L. D. (1930).....	Manchester	0	10	6	—		
Jast, Mrs. L. D. (1931).....	Manchester	0	10	6	—		
Kerfoot, Thos.	Ashton-u-Lyne ...	1	1	0	—		
Kershaw, J. B. C.	Colwyn Bay	0	10	6	—		
Kingston-upon-Hull Corport'n.		1	1	0	—		
Lamb, Mrs. H. C.	Manchester	1	1	0	—		
Lambeth Corporation		1	1	0	—		
Lane, Sir W. Arbuthnot	London	1	1	0	—		
Langford, A. S.	Manchester	0	10	6	—		
Lapage, Dr. C. P.	Manchester	0	10	6	—		
Lea Bridge District Gas Co. ...		—			3	3	0
Lea Recorder Co.	Manchester	2	2	0	—		
Lee, Miss D. C.	Oxford	0	10	6	—		
Lees, Miss M.	Oldham	1	1	0	—		
Lees, Dame Sarah, (1929)	Oldham	5	0	0	—		
Lees, Dame Sarah, (1930)	Oldham	5	0	0	—		
Leicester Corporation		—			10	10	0
Lessing, Dr. R.	London	1	1	0	—		
Lindenmann, A. F., (1930)	London	2	0	0	—		
Lindenmann, A. F., (1931)	London	2	0	0	—		
Linfoot, G., Junr.	Manchester	0	10	6	—		
Lincoln Corporation		2	2	0	—		

Name.	Town.	Subscrip- tions.			Dona- tions.		
Liptak Furnace Arches Ltd. ...	London	1	1	0	—		
Liverpool Corporation		1	1	0	—		
Liverpool Gas Company		10	10	0	—		
London, City of, Electric Lighting Co.		2	2	0	—		
London Electricity Supply Association	London	—			10	10	0
Longley, J. A.	London	1	1	0	—		
Low Temperature Carboniza- tion Ltd.	London	5	5	0	—		
Lytton, Hon. Neville S.	London	1	1	0	—		
McDowall, Steven & Co. Ltd.	Falkirk	1	1	0	—		
MacWilliam, Dr. H. H.	Liverpool	0	10	6	—		
Madan, Capt. G. S.	London	0	10	0	—		
Main, R. & A. Ltd.	London	—			5	5	0
Manchester Corporation		26	5	0	—		
Manchester Corporation Elec. Department		2	2	0	—		
Manchester Corporation Gas Department		5	5	0	—		
Mansfield Corporation		1	1	0	—		
Martland, E. W.	Oldham	0	10	6	—		
Mather, L. E.	Manchester	2	2	0	—		
Mattingley, Mrs.	London	5	0	0	—		
Meehan, Myles	Nottingham	0	10	6	—		
Melland, Ald. W.	Manchester	10	0	0	—		
Melland, Mrs. W.	Manchester	1	1	0	—		
Mid-Kent Gas Light & Coke Co.	Snodland	1	1	0	—		
Mirfield Gas Company		1	1	0	—		
Moon, Edward	London	0	10	0	—		
Morgan, D. & Sons	Cardiff	1	1	0	—		
National Radiator Co.	Hull	5	5	0	—		
Newcastle-upon-Tyne Corporation		5	5	0	—		
Newton, Lord	London	1	1	0	—		
Nicholson, P. B.	Wath-upon-Dearne...	1	1	0	—		
Northbourne, Lord	London	0	10	0	—		
North Middlesex Gas Co.	London				2	2	0
Nottingham Corporation		5	5	0	—		
Owens, Dr. J. S.	London	0	10	6	—		
Oldham Corporation		5	5	0	—		
Parkinson Stove Co.	Birmingham	2	2	0	—		
Payne, Mrs.	London	1	0	0	—		
Peabody, Ltd.	London	1	1	0	—		
Peake, Harald	Doncaster	0	10	6	—		
Pearson & Dorman Long Ltd.	London	1	1	0	—		
Pearson, Dr. S. Vere	Mundesley	0	10	0	—		
Pilcher, G.	London	1	1	0	—		
Pontefract, E. W.	Manchester	1	1	0	—		
Poplar Corporation		1	1	0	—		
Powell, Major Gen. S. H.	London	1	1	0	—		
Powell Duffryn Steam Coal Co.	London	10	10	0	—		
Power Gas Corporation	Stockton-on-Tees ...	1	1	0	—		
Prentice, Dr. W. H.	Salford	3	3	0	—		
Preston Corporation, (1930) ...		1	1	0	—		

Name.	Town.	Subscriptions.			Donations.		
Preston Corporation, (1931) ...		1	1	0	—		
"Prior" Oil Burner Co.	London	1	1	0	—		
Progas Co. Ltd.	London	1	1	0	—		
Radcliffe U.D.C.		1	1	0	—		
Reed, H. A.	Manchester	0	10	6	—		
Refuge Assurance Co.	Manchester	5	5	0	—		
Rhondda, Lady	London	0	10	6	—		
Richmond Gas Stove and Mantle Co.	Warrington	1	0	0	—		
Richmond (Surrey) Corporation		1	1	0	—		
Ripon Corporation Gas Dept.		1	0	0	—		
Robertson, R.	Bristol	0	10	6	—		
Rochdale Corporation		3	3	0	—		
Romford Gas Company		—			2	2	0
Royal Anthracite Stove Works	London	1	1	0	—		
Royton U.D.C.		1	1	0	—		
Russell, Miss D.	London	0	10	0	—		
St. Helens Corporation.....		1	1	0	—		
Salford Corporation Gas Dept.		2	2	0	—		
Salford Corporation		1	1	0	—		
Sanger, Mrs. A. D.	London	1	0	0	—		
Sanitary Inspectors' Assoc. ...	London	1	1	0	—		
Sanitary Publishing Co.	London	—			1	1	0
Saunders & Taylor	Manchester	1	1	0	—		
Sacrborough Gas Co.		1	1	0	—		
Scott, C. P.	Manchester	1	1	0	—		
Scottish Branch, N.S.A.S.		5	5	0	—		
Seale, Mrs. I. L.	Bebington.....	0	10	6	—		
Shaw, Mrs. B.	London	3	3	0	—		
Shaw, Mrs. J.	Alderley Edge	0	10	6	—		
Shaw, Sir Napier, (1930)	London	1	1	0	—		
Shaw, Sir Napier, (1931)	London	1	0	0	—		
Sheffield Gas Co.		1	1	0	—		
Sheffield, Rotherham and District Smoke Abatement Committee	Sheffield	25	0	0	—		
Shell Mex Ltd.	London	2	2	0	—		
Siedler, Dr. P.	Frankfort am Main...	0	10	6	—		
Simon, E. D.	Manchester	1	1	0	—		
Simpson & Godlee.....	Manchester	1	1	0	—		
Smalley, Dr. A. A.	Bowdon	1	0	0	—		
Smethwick Corporation		2	2	0	—		
Smethwick Corporation Gas Department		2	2	0	—		
Smith & Wellstood	London	2	2	0	—		
Smoke Prevention Ltd.	London	1	1	0	—		
Smythe, E. H.	London	0	10	6	—		
Southgate & Dist. Gas Co.		—			2	2	0
South Metropolitan Gas Co. ...	London	26	5	0	—		
South Suburban Gas Co.		—			5	5	0
Spenborough U.D.C.....		2	2	0	—		
Stalybridge Corporation		1	1	0	—		
Stephens, Mrs.	London	1	1	0	—		
Stienthal & Co.	Manchester	2	2	0	—		
Stockport Corporation Gas Dept.		2	2	0	—		

Name.	Town.	Subscriptions.			Donations.		
Stoke-on-Trent Corporation ...		5	5	0	—		
Stretford U.D.C.		2	2	0	—		
Stuart, H. T. R.	Lee-on-the-Solent ...	0	10	6	—		
Sunderland Corporation		5	5	0	—		
Sutton Gas Co.		1	1	0	—		
Swales, J. C. & Co.	Manchester	2	2	0	—		
Swansea Corporation		5	0	0	—		
Tanner, A. E.	Manchester	2	2	0	—		
Taylor Stoker Co.	London	1	1	0	—		
Thompson, A. Hugh	London	0	10	6	—		
Thompson, C. H.	London	0	10	6	—		
Tootal, Broadhurst Lee & Co.	Manchester	3	3	0	—		
Tottenham & Dist. Gas Co.		5	5	0	—		
Tottenham U.D.C.		1	1	0	—		
Trezise, W. E.	Wolverhampton	0	10	6	—		
Trier, J. Newton	London	1	1	0	—		
Troup, Lady	London	0	10	0	—		
Turbine Furnace Co.	London	1	1	0	—		
Universe Petroleum Co. Ltd. ...	London	—			1	1	0
Uxbridge, Maidenhead, Wycombe & District Gas Co.		1	1	0	—		
Wallasey Corporation		5	5	0	—		
Walsall Corporation		1	1	0	—		
Wandsworth, Wimbledon, Epsom & Dist. Gas Co.		5	5	0	—		
Warner, A.	London	1	0	0	—		
Warrington Corporation		2	2	0	—		
Waterhouse, Mrs. S. C.	Bakewell	2	0	0	—		
Watts, S. & J.	Manchester	1	1	0	—		
Wesleyan & General Assurance Co.	Birmingham	1	1	0	—		
West's Gas Improvement Co. Ltd.	Manchester	5	5	0	—		
Whipple, F. J. W.	London	1	0	0	—		
Whyte, Mrs. (1930)	London	1	0	0	—		
Whyte, Mrs. (1931)	London	1	0	0	—		
Whitehead, A. C.	London	1	1	0	—		
Widnes Corporation		1	1	0	—		
Wigglesworth, Miss E.	Botenden	0	10	0	—		
Winby, I. S.	London	0	10	6	—		
Wirral Preservation Society ...		—			1	1	0
Wolverhampton Corporation ...		1	1	0	—		
Wood Green U.D.C.		1	1	0	—		
Woodall-Duckham Ltd.	London	10	0	0	—		
Wray, Miss C.	Saxmundham	0	10	0	—		
York Gas Company		10	0	0	—		
York Corporation		0	10	6	—		
Young, Mrs. T. M.	Manchester	0	10	6	—		
Flavel, Percival (Life Mem- bership)	Leamington	—			25	0	0
Subscriptions and Donations under 10s.		23	6	0	0	7	6

£686 0 6 £154 0 6

THE NATIONAL SMOKE ABATEMENT SOCIETY.

Receipts and Payments Account, for the Year ended June 30th, 1931.

Year ended June 30th, 1930.			Year ended June 30th, 1930.			
£	s.	d.	RECEIPTS.	£	s.	d.
304	19	11	Cash in Bank June 30th, 1930	283	9	4
3	17	4	Cash in Hand June 30th, 1930	6	8	11½
534	15	0	Subscriptions.....	686	0	6
178	8	0	Donations	154	0	6
18	4	2	Sale of Literature	8	1	7
10	19	4	Sundry Receipts	—	—	—
5	7	6	Conference Fees	8	15	0
1	2	10	Bank Interest, less Commission	—	—	—
—	—	—	Interest on £480—5% War Loan for half year to June 1st, 1931	12	0	0
1057	14	1		1158	15	10½

Year ended June 30th, 1930.			Year ended June 30th, 1930.			
£	s.	d.	PAYMENTS.	£	s.	d.
190	10	9	Printing, Stationery and Advertising	134	0	5½
27	16	7	Travelling Expenses.....	44	6	0½
—	—	—	Canvasser's Salary and Expenses	191	13	0
313	12	5	Salary of Secretary and Typist	367	9	0
79	17	8½	General Expenses, Postages and Telephone	106	4	5
66	17	6	Rent, Rates, Gas, Water, etc.	119	8	4
71	4	6	Furniture and Fittings	5	13	0
17	16	4	Exhibition Expenses	9	15	0
283	9	4	Cash in Bank June 30th, 1931	173	3	7
6	8	11½	Cash in Hand June 30th, 1931	7	3	0½
1057	14	1		£1158	15	10½

During the year a legacy of £500 was received from the Estate of Joseph Watson, and this has been invested in the purchase of £480, 5% War Loan.

ABBOTT & SON, Chartered Accountants,
40, South King Street, Manchester.
September 11th, 1931.

MEMBERSHIP FORMS.

INDIVIDUAL.

*To the General Secretary, National Smoke Abatement Society
23, King Street, Manchester.*

Kindly admit the undersigned as a Member/an Associate of
the Society. A first Annual Subscription is enclosed, to date
from 193 ..

Signed

Address in full.....

Minimum Subscription for members
(including Journal) 10/6.
Associate Subscription 5/-.
Life Membership Subscription £25.

COMMERCIAL FIRMS AND AFFILIATED MEMBERS.

(See Constitution, Sections 3 and 4).

*To the General Secretary, National Smoke Abatement Society,
23, King Street, Manchester.*

Kindly admit the undersigned as a member of the Society.
A first Annual Subscription of £ : : is enclosed,
to date from.....193.....

Signed

On behalf of

Address

Representative(s) appointed

Address Communications to { Firm
Minimum Subscription, One Guinea, { Representative,

DONATION FORM.

*To the General Secretary, National Smoke Abatement Society,
23, King Street, Manchester.*

I enclose £..... as a donation to the Society, and
would be pleased to receive notices, literature, etc., from time
to time. (Delete latter clause if desired).

Signed

Address

.....
.....
.....

To be forwarded to the Society.

BANK ORDER FORM.

To the Manager,

The

Please pay the sum of £ : : immediately
and on the same date in each succeeding year until further notice,
to the credit of the NATIONAL SMOKE ABATEMENT SOCIETY, with
the Manchester and County Bank Ltd., 55, King Street, Manchester.

Signed

Address

.....
.....
.....

Date..... 193

FORM OF BEQUEST.

“I give free of duty to the National Smoke Abatement Society
of 23, King Street, Manchester, the sum of £.....to be
applied to the general purposes of the said Society, and I declare
that the receipt of the Treasurer for the time being shall be a
sufficient discharge to my Executors for the same,”

Two Publications essential to all who are interested in Smoke Abatement . .

THE SMOKE ABATEMENT HANDBOOK.

A reference book which gives concisely and yet comprehensively all the facts and figures with which the question is concerned. It contains authoritative articles on: Coal, the Nature of Smoke, the Quantity of Smoke Produced, the Measurement of Atmospheric Impurities and Light, Smoke and Health, the Effects of Smoke upon Buildings and Vegetation, Legislation in England and Scotland, Smokeless Solid Fuels, Gas, Electricity, Oil, etc., the Cost of Smoke, a Tabulated History of Smoke Abatement, Lists of books, associations, etc., etc. .

. . . Price 6d. a copy or 5/- per dozen, post free.

THE JOURNAL OF THE NATIONAL SMOKE ABATE- MENT SOCIETY.

A Quarterly Review which enables the reader to keep up to date with all aspects of the problem. The Journal publishes articles of special and general interest, conference and meeting reports, news items, etc., etc.

. . . Annual Subscription (4 issues), 2/6 post free.

From

THE NATIONAL SMOKE ABATEMENT SOCIETY

23, King Street Manchester

LET

SMOKE

DISAPPEAR

is, as we are unfortunately not magicians, only a pious and entirely useless exhortation. Smoke will not disappear unless we continue our work of creating that public opinion and demand out of which alone can come the desired results. To do this work of education and enlightenment effectively requires money; to do it as intensely as we could, and to make use of the many opportunities we are now forced to forego, requires an income much larger than we have at present. Thus, unfortunately as we are not magicians, we have to stress once again the need for further

LEGACIES

SUBSCRIPTIONS and

DONATIONS

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The National Smoke Abatement Society

**THIRD
ANNUAL
REPORT
1932**

THIRD ANNUAL REPORT

of the

National Smoke Abatement Society

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23 KING STREET
MANCHESTER

National Smoke Abatement Society

President : H. A. DES VOEUX, M.D.

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General Secretary and Editor : ARNOLD MARSH, M.Sc.Tech., M.Inst.F.

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INSTITUTION OF HEATING AND VENTILATING ENGINEERS.—Walter Yates, Frank Biggin.

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HON. AMERICAN CORRESPONDENT.—Mr. H. B. Meller, Pittsburgh.

Information Concerning the Society.

The National Smoke Abatement Society was formed in 1929 by the amalgamation of the Coal Smoke Abatement Society (1899) and the Smoke Abatement League of Great Britain (1909). It is an organization dependent entirely upon voluntary support, and its objects and the conditions of membership will be found in the constitution, on another page.

Offices.—Central (General Secretary's) Offices : 23, King Street, Manchester. Tel. : BLAckfriars 0896.

London Office : 71, Eccleston Square, S.W.1. Tel. Victoria 9274

Scottish Branch : City Chambers, Glasgow.

Exhibits.—The Society is prepared to loan smoke abatement exhibits, suitable for use at health and other exhibitions, free of charge ; or to take and equip stands at such exhibitions. A list of exhibits available will be sent on request.

Lectures.—The Society will endeavour to supply lecturers on smoke abatement in any part of the country. As a rule, the only charge is for the travelling expenses of the lecturer. The services of the Secretary of the Society are generally available for lectures.

Lantern Slides.—The Society possesses a large number of lantern slides dealing with various aspects of smoke abatement. These will be loaned for the use of lecturers at a charge of one penny per slide, plus postages. A catalogue of the slides will be sent on request.

Shade Cards for Smoke Inspection.—Tinted shade cards, showing different densities of smoke, of which the denser tints have been adopted as nuisances by magistrates hearing coal smoke complaints, are available at a price of 6d. each.

Information and Advice.—The Society is glad, at any time, to be of assistance to any person requiring information on smoke abatement and related matters. Inquiries should be addressed to the General Secretary, at 23, King Street, Manchester.

List of Publications.

(All prices include postage).

1. **The Smoke Abatement Handbook.**—A newly-published reference book containing concise authoritative articles on the principal aspects of the subject, numerous statistics and a wide variety of useful information. A vademecum for those who write or speak on the subject. 8vo. pp. 48. 6d. 5/- per doz. copies.
2. **Home Fires Without Smoke.**—Edited by Cyril Elliott and Marion Fitzgerald. 8vo. pp. 59. 2/- and 3/6 (cloth).
3. **Report of the 1924 Smoke Abatement Conference.**—Only a few copies left of a valuable Report. 4to. pp. 308. 5/-.
4. **Report of the 1926 Smoke Abatement Conference.** 4to. pp. 98. 1/-.
5. **Smoke Abatement in Salt Lake City, Utah.**—A full report of the intensive and successful campaign in Salt Lake City. 8vo. pp. 43. 3d.
6. **Smoke and Health.**—By Dr. J. S. Taylor, M.D., D.P.H., Assistant Medical Officer of Health, Manchester. 8vo. pp. 12. 2d.
7. **The Progress of the Electrical Grid.**—A paper read at the Liverpool Conference, 1931, by Robert Blackmore, M.I.E.E. 4to. 3d.
8. **The Production and Use of the New Smokeless Fuel "Dryco" in Liverpool.**—A paper read at the Liverpool Conference, 1931, by Ralph E. Gibson, M.Inst.C.E., M.Inst.Gas.E. 4to. 3d.
9. **Atmospheric Pollution as Affecting Visibility and Visibility as Affecting Aviation.**—Papers read at the Leicester Conference, 1930, by M. G. Bennett, M.Sc., and F. Entwistle, B.Sc., of the Meteorological Office, Air Ministry. 4to. 3d.
10. **Reprints From the Papers Read at the 1924 Conference.**—
"The Complete Gasification of Coal." T. R. Wollaston, M.I.Mech.E.
"The Fuel of the Future." Sir Francis Goodenough.
"Powdered Fuel and the Smoke Problem." J. T. Dunn, D.Sc., F.I.C.
"How Electricity Can Help in Abating Smoke." Julius Frith, M.Sc., M.I.E.E.

“Power from Sources other than Coal.” Prof. Miles Walker,
M.A., D.Sc.

“Furnace and Tank Boiler Design.” W. H. Casmey.

“The Smoke Inspector and the Cost of Production.” H. G.
Clinch, M.R.San.I., M.I.H.

Price, 3d. each.

11. **The Influence of Air Pollution Upon Vegetation.**—By W. W. Pettigrew, V.M.H. 8vo. pp. 8. 6d.
12. **Clean Air for Leeds.**—(Published Leeds Tercentenary Committee). pp. 52. 3d.
13. **Smoke Abatement and Fuel Economy in Steam Boiler Practice.** (Published Manchester and District Regional Smoke Abatement Committee). 8vo. pp. 11. 1d.
- 14 and 15. **The Open Fire, and The Black Smoke Tax.**—Pamphlets published by the Manchester Air Pollution Advisory Board. 8vo. Gratis, by post, 1d.
16. **N.S.A.S. Annual Reports.**—Gratis, by post 1d.
17. **Smoke and Fumes Nuisances from Road Vehicles.**—A Report of the Meeting held on June 3rd, 1932, by Dr. J. S. Owens, A.M.Inst.C.E., M.I.Mech.E. and R. P. Mahaffy, M.A. 3d.
18. **The Journal of the National Smoke Abatement Society.**—A Quarterly Journal devoted to smoke prevention. It is indispensable to all who are working upon or interested in, the problems of smoke abatement and atmospheric pollution. With the co-operation of leading authorities it deals with industrial and domestic problems ; technical methods ; news from local authorities and Regional Committees ; reports of conferences, inquiries, etc., and keeps the reader up-to-date in every aspect of the problem. Per annum (4 issues), 2/6. Post free. To members : GRATIS.

Ready Shortly.—

The proceedings of the Newcastle-upon-Tyne Conference, 1932. Containing the Presidential Address, papers by R. A. Mott, Alderman David Adams, and A. E. Crossley, with discussion.

“Fumifugium.”

It is hoped that it will be possible to publish, within a few months, a reprint of John Evelyn’s famous pamphlet on smoke Abatement—“Fumifugium” (1661).

CONSTITUTION OF THE SOCIETY.

1. **NAME.**—The Society shall be called the NATIONAL SMOKE ABATEMENT SOCIETY.

2. **OBJECTS.**—The Society shall be concerned with the prevention of air pollution generally, and in particular, that arising from coal smoke.

The objects of the Society shall be :—

- (a) To create an informed public opinion on the evils of air pollution.
- (b) To inquire into, and if thought advisable, assist investigations directed towards the abolition of smoke, whether industrial or domestic.
- (c) To take steps to popularize the use of smokeless methods of heat and power production.
- (d) To promote and support legislation for preventing the pollution of the atmosphere.

3. **MEMBERSHIP.**—The Society shall consist of :—

- (a) Life Members.
- (b) Members.
- (c) Associates.
- (d) Affiliated Members.

Life Members.—A donation of not less than twenty-five guineas paid in one amount by any individual, shall constitute the donor a member for life.

Members.—An Annual Subscription of not less than half a guinea in the case of an individual, or one guinea in the case of a commercial firm, shall constitute the subscriber a member. A commercial firm registered as a member shall be entitled to nominate a representative to exercise the privileges of membership as regards attendance at meetings, voting, etc.

Associates.—An Annual Subscription of not less than five shillings shall constitute that subscriber an Associate.

Affiliated Members.—The payment of not less than one guinea by any Local Authority, Society or Institution, shall constitute the subscribing body an Affiliated Member. The affiliated Member shall be entitled to appoint two representatives to the Council of the Society, who shall receive the privileges of full membership of the Society.

4. **PRIVILEGES OF MEMBERSHIP.**—The privileges of membership shall include :—

- (a) Advice and assistance in questions relating to smoke abatement and fuel economy as far as the circumstances of the Society will permit.
- (b) Free admission to lectures arranged by the Society.
- (c) The right to receive free of cost, the general publications of the Society as they appear, including the Journal of the Society. Associates shall not, however, receive the Journal and such other literature as may be decided upon from time to time.

5. **THE COUNCIL.**—The Council of the Society shall consist of the Officers, the members of the Executive Committee, two representatives from each Affiliated Member, together with not more than thirty members to be elected annually at the General Meeting.

The business of the Council shall be to direct the policy of the Society in general and to receive any periodical reports from the Executive or other committee.

The Council shall meet at least twice a year, of which at least one meeting shall take place in London.

6. **THE EXECUTIVE COMMITTEE.**—The Executive Committee shall consist of the Officers and not less than twelve members or representatives of Affiliated members, who shall be elected annually at the General Meeting of the Society. The Executive Committee shall have power to appoint sub-committees, and to co-opt additional members. Five shall form a quorum.

The Committee shall meet as required, and the place of meeting shall be at the central offices of the Society, or other place at the discretion of the Committee.

The business of the Committee shall be to manage the affairs of the Society.

7. **OFFICERS.**—The Officers of the Society shall be President, Vice-President and Honorary Treasurer, to be elected annually. The Chairman of the Committee and of the Council, shall also be Officers, but shall be elected by their respective Committees.

8.—**GENERAL MEETING.**—The General Meeting of the Society shall be held annually at which shall be presented the Annual Report and the Audited Financial Statement, and at which the Officers, the Council and the Executive Committee for the following year shall be elected. Other general meetings shall be held on the requisition of the Council or Executive Committee, or of 20 members of the Society. One month's notice shall be given of all General Meetings.

9. **ALTERATION TO CONSTITUTION.**—No change shall be made in the constitution of the Society, except by a two-thirds majority of the members present and voting at the Annual Meeting or at a Meeting called specially for the purpose. A notice in writing of any resolution to be submitted for this purpose must be sent to all members of the Society at least a fortnight before the Annual or Special General Meeting.

10. **ACCOUNTS.**—Accounts shall be kept of all moneys received and expended by the Society, and once at least every year the accounts of the Society shall be examined and the correctness thereof certified by a qualified auditor.

11. **BRANCHES.**—Branches of the Society shall be constituted, as far as possible, in the town or districts of the United Kingdom, to deal with local smoke abatement and air pollution problems. Branches shall settle their own constitution and terms of membership, but shall pay an affiliation fee of at least sixpence for every individual member and of two shillings and sixpence for every firm affiliated to the National Society, except in the case of members who are also members of the National Society. Members of the Branches who are not also members of the National Society shall be entitled to attend the General and other meetings of the Society, but shall not be entitled to vote thereat. The Branch shall, however, appoint two delegates to the Council of the National Society and to the Annual General Meeting, who shall have full voting powers.

12. **JOURNAL AND LITERATURE.**—A copy of each issue of the Journal of the Society, together with all other current general literature shall be sent free to each member and delegate from each Affiliated member ; to the Town Clerk of each affiliated Local Authority, and to the Secretary of each affiliated Society or Institution.

13. **INTERPRETATION OF CONSTITUTION.**—The interpretation of these rules together with any question on which the rules are silent shall be decided by the Executive Committee until the next Annual General Meeting.

THIRD ANNUAL REPORT

for the Year ended June 30th. 1932.

General Review.—Although the present economic depression which has affected constructive activity of every kind has probably hindered the development of smoke abatement work in some respects, there has been a gratifying amount of attention given to the subject during the last twelve months.

The movement is still at the stage where discussion and the dissemination of information are almost as valuable as, and second only to, direct steps towards reducing the volume of smoke emitted, for only by continuing to create and sustain favourable opinion can there be achieved a satisfactory abatement of smoke in the future. It is, of course, impossible to indicate what reduction in the quantity of smoke has been achieved during the course of a single year, but that a continuous reduction is taking place is certain. The gas and electrical industries show once again, in spite of the industrial depression, considerable increases in the consumption of their products, and the solid fuels also show, on the whole, a wider use and increased popularity. It is regretted that much of the industrial smoke that has been “abated” has been due to industrial stagnation ; and it is further regretted that many people should wish for an increase in smoke emission as a sign of trade activity. The idea that smoke is a necessary adjunct to prosperity dies hard, but it is a pity that the fallacy should be believed by many members of local authorities whose acquaintance with problems of public health should be a little more advanced. Analyses of atmospheric deposits during the last six years (published in the Society’s *Journal*, Spring, 1932) show that there has been a marked decrease in the deposit of tar, sulphur acids, and solids during that period.

A number of papers have been read on various aspects of the smoke nuisance to other societies and conferences during the year. We should like to take this opportunity of expressing appreciation of the many bodies which are stressing the value of smoke abatement problems by including them so frequently in their syllabuses and conference programmes.

The Scottish Branch of the Society has enjoyed another successful year of activity. The sixteenth session of the classes for firemen and boiler attendants was held during the winter, and was attended by a total of 92 men in the ordinary and advanced classes. Examinations were held at the end of the course. A further course under the auspices of the Branch and in collaboration with the

Ayrshire County Council has been held in the burgh of Irvine, and has had an attendance of about 40. It is expected that the course will be continued during the coming winter. The Annual Conference of the Branch was held in Glasgow on May 5th, when a large number of members and delegates listened to papers on: "Maternal Mortality and the Domestic Chimney," by Dr. Elizabeth C. Mudie; "Smoke and the Commonweal," by Dr. Langrishe; "The Destructive Effect of Smoke on Buildings," by Sir John Stirling-Maxwell; "The Effect of a Smoke-laden Atmosphere on Horticulture," by Mr. William Besant.

The principal activity of the Manchester Branch of the Society during the year was a public meeting arranged with the Manchester and Salford Women Citizens' Association on "The City of the Future," on November 25th. The speakers were Councillor A. T. Pike, secretary of the Garden Cities and Town-Planning Association, and Dr. T. W. Naylor Barlow, Medical Officer of Wallasey and member of the Council of the Society, who dealt with the smoke problem.

The Regional Advisory Committees in the Midlands, Manchester and District, and the West Riding of Yorkshire, have continued their activities. The economic situation has unfortunately led to a postponement of the scheme for the formation of a Statutory Committee in South-east Lancashire which was mentioned in the last Annual Report. The West Riding Committee has continued with its courses and examinations for stokers, and during the winter a similar course was arranged by the Midlands Committee.

Mention should also be made of the very successful classes held by the Huddersfield Smoke Abatement Council under the direction of Mr. Edgar Lunn. If such valuable and enthusiastic work could only be initiated in every town throughout the country there would be a more rapid progress and formation of public opinion than has yet been known.

We should like to draw attention to a direct and practical resolution passed at a meeting of the County of Durham Federation of Women's Institutes:—

"That the Women's Institutes of this country could greatly assist child welfare work by devoting some of their energy to the reduction of atmospheric pollution by smoke."

This can be heartily endorsed, and the hope expressed that the recommendation be taken up by the Institutes.

Liverpool Conference.—The Annual Meeting and Conference held in Liverpool on September 18th to 20th was the largest attended of these gatherings, and was most successful from every point of view. The papers read were as follows: "The Progress of

the Electrical Grid," by Robert Blackmore, M.I.E.E. ; "Some Notes on the Production and Use of the new Smokeless Fuel 'Dryco' in Liverpool," by Ralph E. Gibson, M.Inst. C.E., M.Inst. Gas E. ; "Regional and Statutory Smoke Abatement Committees," by Members of the Committees ; A Demonstration of the Apparatus used for the measurement of atmospheric impurities (kindly loaned by the Department of Scientific and Industrial Research), by W. H. Roberts, M.Sc., F.I.C.

A visit was made to the new Power station at Clarence Dock and to the Liverpool Housing Estates. This, and the Reception held on the Friday evening, was by the kind invitation of the Lord Mayor and Corporation of the City, to whom our thanks are due.

Newcastle upon Tyne Conference.—An invitation from the Newcastle upon Tyne Corporation for the Society to hold its 1932 Conference in that City was received and accepted by the Executive Committee.

Royal Sanitary Institute Congress.—The Society was represented by the Secretary at the Glasgow Congress of the Royal Sanitary Institute, and a stand, which attracted much attention, was taken at the Exhibition held in conjunction with the Congress. A bronze medal for the exhibit was awarded to the Society.

Council Meeting, York.—A meeting of the Council was held at York on January 26th, at which the principal business was a discussion of resolutions on Regional Organization for smoke abatement. A preamble, showing the reasons for further action by the formation of regional committees, has been printed in full in the *Journal*, and the resolutions passed were as follows:—

"The Council of the National Smoke Abatement Society, having considered the administration of the law relating to smoke abatement in this country, and having noted the grave defects inherent in the present system, RESOLVES:

- (1) That Local Authorities be urged to combine for the purpose of setting up suitable regional organizations for the administration of smoke abatement law ;
- (2) That, pending the formation of statutory regional organizations, Local Authorities be urged to establish Advisory Committees similar to those already in existence ;
- (3) That the support of the National Smoke Abatement Society be given to such projects as will further these proposals.

- (4) The Council further resolves that copies of these resolutions and the accompanying Preamble be sent to the Minister of Health, to the existing Regional Committees, and to the Public Health Committees of all Local Authorities concerned, requesting the last to discuss the proposals and to signify approval and support of their substance."

The Preamble and Resolutions were circulated to Local Authorities, of whom only a small minority are prepared to give their support to the proposals. Copies were sent to 385 authorities, of whom 90 had replied. 60 intimated that they wished to take no action, 17 were in favour, and 13 were not in favour of the resolutions.

Council Meeting, London.—At a Council Meeting held in London on June 3rd, a further resolution, in the following terms, was passed :—

"That steps be taken to prepare and issue a statement showing the advantages of the setting up of Regional Advisory Committees in order to co-ordinate the administration of the law relating to smoke nuisances over wide areas and that efforts be made to persuade the Local Authorities concerned to co-operate in the formation of such Advisory Committees."

Smoke and Fumes Nuisances from Road Vehicles.—The open meeting following the June Council meeting was devoted to papers and discussion upon this subject. The technical aspects were considered by Dr. J. S. Owens, M.D., M.Inst. C.E., M.I.Mech. E., and Mr. R. P. Mahaffy, B.A., Barrister-at-Law, dealt with the legal questions involved. The Report of this meeting has been printed in pamphlet form, and contains both papers and a summary of the discussion. This was the first occasion on which the Society had given its attention to a problem of atmospheric pollution beyond that caused by coal smoke, but as a result of the meeting it has been agreed that this important subject should henceforth be included in the work of the Society.

The Society of Medical Officers of Health.—A deputation from the Society was received by the Council of the Society of Medical Officers of Health on December 18th, for the purpose of urging that smoke abatement should be considered more definitely as a necessary and important factor in public health work. The members of the Council were addressed by Dr. H. A. Des Voeux and Alderman Melland. As a result of this deputation the following resolution was passed at a later date :—

“That the Society of Medical Officers of Health is convinced that atmospheric pollution by smoke and other products of combustion, with the consequent deprivation of natural sunlight in our cities and towns, is an important cause of ill-health in this country; and therefore considers it desirable that systematic observations of the state of the atmosphere, including estimations of soot deposit, chemical constituents, gaseous pollution, penetration of ultra-violet rays, etc., should be carried out by means of scientific apparatus, such as the standard gauge, the standard automatic filter and various other instruments recommended by the Department of Scientific and Industrial Research, as a matter of routine by public health departments.”

Inquiry on the Use of Gas Coke.—The inquiry held by the Smoke Abatement League of Great Britain on “The Present Position of the Solid Smokeless Fuels,” held in 1928, was concerned mainly with the low temperature carbonization fuels. It was considered that it would be useful to ascertain the general opinion with respect to the new grades of gas coke, and accordingly a verbal questionnaire has been put to users of the graded domestic coke sold in Manchester. The results of this inquiry, which were most favourable to the fuel, are published in detail in the *Journal* (Summer issue, 1932).

Exhibitions and Lectures.—The Society has again participated in a number of Health Exhibitions and has loaned exhibition material to other bodies. A number of lectures have been given by the Secretary.

Publications.—Reference to the statement of accounts will show that there has been a considerable increase in the quantity of literature sold during the year. This is largely due to the publication of the “Smoke Abatement Handbook,” of which nearly 4,000 copies have been sold and distributed up to the present. The issue of this handbook has been very successful and has created much favourable comment. Over seventy reviews and press notices have been published in the technical and daily press. Other publications have also been issued. The *Journal* continues to be published on a satisfactory basis, and a number of useful articles and reports have been issued during the year. The *Journal* is now sent to most of the principal public libraries in the country.

Membership and Financial Position.—Owing to the possibility of a diminution in income due to the financial situation, no special expenditure has been made during the year. We have, however, been more fortunate than many voluntary organizations,

and our income for the year shows a small increase over that for the year ended June 30th, 1931. This is principally due to a number of new subscriptions from gas undertakings which were the response made to the appeal made on our behalf by the National Gas Council, which was mentioned in the preceding Annual Report. There have also been a number of new individual members, an increase in the receipts from the sale of literature, and a special appeal to members to continue with their subscriptions. Our grateful thanks are due to all whose names appear in the following list of subscriptions for their continued support, which, especially at the present time, is most greatly appreciated.

WILL MELLAND, *Chairman and Hon. Treasurer.*

ARNOLD MARSH, *General Secretary.*

Name.	Town.	Subscriptions.			Donations.
Elland Gas Co. (1931)		1	1	0	—
Elland Gas Co. (1932)		1	1	0	—
Elliott Bros (London) Ltd.	London	1	1	0	—
Evans, Mrs. Richardson	London	1	0	0	—
Exeter Gaslight & Coke Co. (1931)		2	2	0	—
Exeter Gaslight & Coke Co. (1932)		2	2	0	—
Falk, Stadelmann & Co.	London	1	1	0	—
Failsworth U.D.C.		1	1	0	—
Farnworth U.D.C.		3	3	0	—
Finsbury Corporation		1	1	0	—
Fitton, F. A. (1931)	Manchester	0	10	6	—
Fitton, F. A. (1932)	Manchester	0	10	6	—
Fitzgerald, Miss M.	Bolton	0	10	6	—
Flugel, Mrs.	London	1	0	0	—
Forster, A. Lindsay (1931)	Glasgow	1	1	0	—
Forster, A. Lindsay (1932)	Glasgow	1	1	0	—
Forward, A.	New York.....	1	1	0	—
Fothergill & Harvey	Littleborough	1	1	0	—
Fox, Miss A. S.	London	0	10	6	—
Fox, F.	London	0	10	6	—
Fry, Miss A. R.	London	1	0	0	—
Gallenkamp & Co. Ltd.	London	1	1	0	—
Gandy, Henry	Corbridge	0	10	6	—
Gandy, Charles	Manchester	4	4	0	—
Gas Chambers & Coke Ovens Ltd.	London	1	1	0	—
Gas Light & Coke Co.	London	52	10	0	—
Geldard, N.	Ilkley	0	10	6	—
Gerrard, A. Dennis	Manchester	1	1	0	—
General Electric Co.	London	5	5	0	—
Gibson, R. E.	Liverpool	0	10	6	—
Gibson, S. H.	Clifton	0	10	6	—
Gladstone, Lord.....	London	—			1 1 0
Glen, R. A.	London	1	1	0	—
Gloucester Gas Light Co.		1	1	0	—
Glover & Main, Ltd.	London	5	5	0	—
Godalming Gas & Coke Co. ...		1	1	0	—
Graham, J. W.	Cambridge	1	1	0	—
Greg, H. S.	Haverthwaite	0	10	0	—
Gt. Grimsby Gas Co.		1	1	0	—
Gt. Yarmouth Gas Co.		2	2	0	—
Grimes, Miss A.	London	1	1	0	—
Guildford Gaslight & Coke Co....		2	2	0	—
Hague, J. Haughton	Oldham	1	1	0	—
Halifax Corporation		2	2	0	—
Hall, Higham & Co.	Manchester	1	1	0	—
Hampstead Heath Protection Society	London	1	1	0	—
Hancock, A.	Manchester	0	10	6	—
Hardy, G. & Co. (1931)	Manchester	2	2	0	—
Hardy, G. & Co. (1932)	Manchester	2	2	0	—
Harrogate Corporation		2	2	0	—
Harrogate Gas Co.		3	3	0	—

Name.	Town.	Subscrip- tions.			Dona- tions.
Hartlepool Gas & Water Co. ...		1	1	0	—
Herbert, Mrs. N.	Alderley Edge	0	10	6	—
Herbert, Alfred Ltd.	Coventry	1	1	0	—
Herford, Miss A.	Manchester	0	10	0	—
Herne Bay Gas Co.		1	1	0	—
Hessle Gas Co.		1	1	0	—
Hexham Gas Co.		1	1	0	—
Heywood Corporation Gas Dept.		1	1	0	—
Higgs, Mrs. M.	Oldham	0	10	6	—
Hoare, A.	London	0	10	0	—
Hocken, E. B.	Nottingham	0	10	6	—
Holmes, W. C. & Co.	Huddersfield	5	5	0	—
Horsfall, T. C.	London	1	1	0	—
Horwich U.D.C.		1	1	0	—
Huddersfield Corporation.....		2	2	0	—
Hull Corporation Health Dept.		1	1	0	—
Humphrey, Miss A. M.	London	0	12	6	—
Hunter, R. L.	London	1	1	0	—
Huntley, C. Gordon	Manchester	0	10	6	—
Hyde, Mrs. A.	London	1	0	0	—
Idris, Ltd.	London	2	2	0	—
Illingworth Carbonization Ltd.	Bradford	2	2	0	—
Illingworth, S. E.	Harrogate	1	0	0	—
Ingham, W.	Manchester	0	10	0	—
Institution of Gas Engineers— (1931)	London	10	10	0	—
Institution of Gas Engineers (1932)	London	10	10	0	—
Institution of Heating and Ventilating Engineers	London	3	3	0	—
International Combustion Ltd.	London	1	1	0	—
Ipswich Gas Light Co.		1	1	0	—
Irlam U.D.C.		1	1	0	—
Jast, Mrs.	Manchester	0	10	6	—
Jennison, Mrs.	Eastbourne	—			1 1 0
Keeley, Robert	Prestwich	0	10	0	—
Kershaw, J. B. C.	Colwyn Bay	0	10	6	—
Kildwich Parish Gas Co.		1	1	0	—
Lacey, Stephen	London	2	2	0	—
Lamb, Mrs. H. C.	Manchester	1	1	0	—
Langford, A. S.	Manchester	0	10	6	—
Lancashire and Cheshire Gas Exhibit Committee	Manchester	6	6	0	—
Lapage, Dr. C. P.	Manchester	0	10	6	—
Lea Bridge Dist. Gas Co.		—			3 3 0
Lea Recorder Co.	Manchester	2	2	0	—
Leeds Corporation Health Dept.		10	10	0	—
Leeds Corporation Gas Dept. ...		5	0	0	—
Lee, Miss Dora	Oxford	1	1	0	—
Lees, Dame S. A.	Oldham	5	0	0	—
Less, Miss M.	Oldham	1	1	0	—
Leicester Corporation		10	10	0	—
Leicester Corporation Gas Dept.		1	1	0	—
Lincoln Corporation		2	2	0	—

Name.	Town.	Subscriptions.			Donations.		
Linfoot, G.	Manchester	0	10	6	—	—	—
Liptak Furnace Arches Ltd. ...	London	0	10	6	—	—	—
Liverpool Corporation		1	1	0	—	—	—
Liverpool Gas Company		10	10	0	—	—	—
London, City of, Electric Lighting Co.	London	2	2	0	—	—	—
London Electric Supply Assoc.	London	—	—	—	10	10	0
London Power Co.	London	1	1	0	—	—	—
Longley, J. A.	London	1	1	0	—	—	—
Low Temperature Carbonization Ltd.	London	5	5	0	—	—	—
Ludlam, J. E.	Ashton-under-Lyne...	0	10	0	—	—	—
Luton Gas Co.		2	2	0	—	—	—
Lytton, Hon. Neville S.	London	1	1	0	—	—	—
Maidstone Gas Co.		1	1	0	—	—	—
Manchester Corporation Health Dept.		26	5	0	—	—	—
Manchester Corporation Gas Dept.		5	5	0	—	—	—
Manchester Corporation Elec. Dept.		2	2	0	—	—	—
Mansfield Corporation		1	1	0	—	—	—
Martin, A. J.	London	0	15	0	—	—	—
Mather, L. E.	Manchester	1	1	0	—	—	—
Melland, B. M.	London	0	10	0	—	—	—
Melland, Will	Manchester	10	0	0	—	—	—
Mid Kent Gaslight & Coke Co....		1	1	0	—	—	—
Mirfield Corporation		1	1	0	—	—	—
Moon, E.	London	—	—	—	0	10	0
Moore, S. H.	Chester	0	10	6	—	—	—
Morgan, D. & Sons	Cardiff	1	1	0	—	—	—
Macwilliam, Dr. H. H.	Liverpool	0	10	6	—	—	—
National Radiator Co.	Hull	5	5	0	—	—	—
Newcastle Corporation (1932)...		5	5	0	—	—	—
Newcastle Corporation (1933)...		5	5	0	—	—	—
Newcastle & Gateshead Gas Co.		1	1	0	—	—	—
Newton, Lord	London	1	1	0	—	—	—
Nottingham Corporation		5	5	0	—	—	—
North Middlesex Gas Co.	London	—	—	—	2	2	0
Northbourne, Lord	London	0	10	0	—	—	—
Nuneaton Gas Co.		1	1	0	—	—	—
Oldham Corporation		5	5	0	—	—	—
Orr, J. H.	Cheadle	0	10	6	—	—	—
Oxford Gas Co.		1	1	0	—	—	—
Parkinson Stove Co.	Birmingham	2	2	0	—	—	—
Payne, Mrs. A. L.	London	1	0	0	—	—	—
Peake, H.	Doncaster	0	10	6	—	—	—
Pearson, Dr. S. Vere	Mundesley	0	10	0	—	—	—
Pilcher, J. T.	London	2	2	0	—	—	—
Pontefract Bros.	Manchester	1	1	0	—	—	—
Poplar Corporation		1	1	0	—	—	—
Portsmouth Gas Co.		1	1	0	—	—	—
Powell, Major S. H.	London	0	10	6	—	—	—
Power Gas Corporation	Stockton-on-Tees ...	1	1	0	—	—	—

Name.	Town.	Subscrip- tions.	Donations.
Prentice, Dr. B.	Swinton	0 10 0	—
“Prior” Oil Burner Ltd.	London	1 1 0	—
Preston, J. R.	London	0 10 6	—
Preston Corporation		1 1 0	—
Radcliffe U.D.C.		1 1 0	—
Radiation Ltd.	London	5 5 0	—
Reed, H. A.	London	0 10 6	—
Refuge Assurance Co.	Manchester	5 5 0	—
Rhondda, Viscountess	London	0 10 6	—
Richmond (Surrey) Corporation		1 1 0	—
Ripon Corporation		1 0 0	—
Robertson, R.	Bristol	0 10 6	—
Robinson, Mrs. S.	Hale	0 10 6	—
Rochdale Corporation		3 3 0	—
Royton U.D.C.		1 1 0	—
Russell, Miss D.	London	0 10 0	—
St. Helens Corporation		1 1 0	—
Sanitary Inspectors’ Assoc.....	London	1 0 0	—
Sanger, Mrs. A. D.	London	1 0 0	—
Salford Corporation Health Dept.		1 1 0	—
Salford Corporation Gas Dept.		2 2 0	—
Saunders & Taylor	Manchester	1 1 0	—
Scottish Branch N.S.A.S.....	Glasgow	5 5 0	—
Seal, Mrs. I. L.	Prestatyn	0 10 6	—
Shaw, Mrs. J.....	Alderley Edge	0 10 6	—
Shaw, Sir Napier	London	1 1 0	—
Shaw, Sir Napier (1933)	London	2 2 0	—
Shaw, Mrs. B.	London	3 3 0	—
Sheffield, Rotherham & District Smoke Abatement Committee	Sheffield	25 0 0	—
Sheffield Gas Co.		1 1 0	—
Shrewsbury Gaslight Co.		1 1 0	—
Siedler, Dr. Philip	Germany	0 15 0	—
Simon, Sir Ernest	Manchester	1 1 0	—
Simon, Son & Co.	Manchester	2 2 0	—
Simpson & Godlee	Manchester	1 1 0	—
Smalley, A. A. Dr.	Bowdon	1 0 0	—
Smethwick Corporation		2 2 0	—
Smith & Wellstood	London	1 1 0	—
Smoke Prevention Ltd.	London	1 1 0	—
Smythe, E. H.	London	0 10 6	—
Solihull Gas Co.		1 1 0	—
Southampton Gaslight Co.		1 1 0	—
Southern, G. W.	Sheffield	0 10 6	—
Southgate & Dist. Gas Co.		—	2 2 0
South Metropolitan Gas Co. ...	London	26 5 0	—
South Suburban Gas Co.	London	5 5 0	—
Spenborough U.D.C.		2 2 0	—
Stalybridge Corporation		1 1 0	—
Stockport Gas Committee		2 2 0	—
Stoke-on-Trent Corporation Gas Dept.		1 1 0	—
Stoke-on-Trent Corporation ...		5 5 0	—
Stourbridge Gas Co.		1 1 0	—
Stretford & Dist. Gas Board.....		1 1 0	—

Name.	Town.	Subscriptions.			Donations.
Stretford U.D.C.		2	2	0	—
Stuart, H. T. R.	Lee-on-the-Solent ...	0	10	6	—
Sunderland Corporation		5	5	0	—
Swales, J. G. & Co.	Manchester	2	2	0	—
Swindon United Gas Co.		1	1	0	—
Thomas, J. W.	Manchester	0	10	6	—
Thompson, A. Hugh	London	1	1	0	—
Thompson, C. H.	London	0	10	6	—
Tipton U.D.C. Gas Department		1	1	0	—
Tootal, Broadhurst, Lee & Co....	Manchester	3	3	0	—
Tottenham U.D.C.		1	1	0	—
Tottenham & Dist. Gas Co. ...		5	5	0	—
Treize, W. E.	Wolverhampton	1	1	0	—
Trier, J. Newton	London	1	1	0	—
Troup, Lady	London	0	10	0	—
Turbine Furnace Co.....	London	1	1	0	—
Unwin, Stanley		—			0 10 0
Universe Petroleum Co. Ltd. ...	London	1	1	0	—
Uxbridge, Maidenhead, Wycombe & District Gas Co.		1	1	0	—
Des Voeux, Dr. H. A.	Lymington	2	2	0	—
Wake,	London	0	10	6	—
Wakefield Corporation		1	1	0	—
Wakefield Gaslight Co.		1	1	0	—
Wallasey Corporation		5	5	0	—
Walsall Corporation		1	1	0	—
Wandsworth, Wimbledon, Epsom & District Gas Co		5	5	0	—
Wandsworth, Wimbledon, Epsom & District Gas Co. (1933)		5	5	0	—
Warner, Alfred	London	1	0	0	—
Warrington Corporation		2	2	0	—
Waterhouse, Mrs. S. C.	Bakewell	2	0	0	—
Watts, S. & J.	Manchester	1	1	0	—
Wesleyan & General Assurance Co.	Birmingham	1	1	0	—
West's Gas Improvements	Manchester	5	5	0	—
Whessoe Foundry & Engineering Co. Ltd.	Darlington	1	1	0	—
Whipple, Dr. F. J. W.	London	1	0	0	—
White, Captain J. Bell	London	1	1	0	—
Whitehead, A.	London	1	1	0	—
Whyte, Mrs. J.	London	1	0	0	—
Widnes Corporation		1	1	0	—
Wigglesworth, Miss E.	Rawtenstall	0	10	0	—
Willesden U.D.C.		1	1	0	—
Willey & Co.	Leicester	2	2	0	—
Williamson, D. B.	Sheffield	0	10	6	—
Winchester Gas & Water Co. ...		1	1	0	—
Wolverhampton Gas Co.		2	2	0	—
Wolverhampton Corporation Electricity Dept.		1	1	0	—

Name.	Town.	Subscrip- tions.	Dona- tions.
Woodall Duckham Co.	London	10 0 0	—
Wrexham Corporation		1 1 0	—
York Corporation Health Dept.		0 10 6	—
York Gas Company		10 0 0	—
Young, Mrs. T. M.....	Manchester	0 10 6	—
Subscriptions and Donations under 10/-		12 1 6	—

£799	2	0	£45	13	6
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THE NATIONAL SMOKE ABATEMENT SOCIETY.

Receipts and Payments Account, for the Year ended June 30th, 1932

Year ended June 30th, 1931.			RECEIPTS			
£	s.	d.	£	s.	d.	
283	9	4	Cash in Bank, June 30th, 1931	173	3	7
6	8	11½	Cash in hand, June 30th, 1931	7	3	0½
686	0	6	Subscriptions.....	799	2	0
154	0	6	Donations	45	13	6
8	1	7	Sale of Literature	53	8	9
8	15	0	Conference Fees	12	2	6
12	0	0	Interest on £480—5% War Loan.....	24	0	0
—	—	—	Sundry Receipts	2	11	8
1158	15	10½	£1117	5	0½	

Year ended June 30th, 1931			PAYMENTS			
£	s.	d.	£	s.	d.	
134	0	5½	Printing, Stationery and Advertising	116	16	6½
44	6	0½	Travelling Expenses.....	33	3	5½
367	9	0	Salaries of Secretary and Typist.....	368	4	2
106	4	5	General Expenses, Postages and Telephone	110	15	8
119	8	4	Rent, Rates, Gas, Water, etc.....	106	17	8
5	13	0	Furniture and Fittings	4	4	10½
9	15	0	Exhibition Expenses	—	—	—
191	13	0	Canvasser's Salary and Expenses	—	—	—
173	3	7	Cash in Bank, June 30th, 1932.....	369	1	3
7	3	0½	Cash in hand, June 30th, 1932.....	8	1	5
1158	15	10½	£1117	5	0½	

The Society held at June 30th, 1932, £480 of 5% War Stock.

ABBOTT & SON, Chartered Accountants,
40, South King Street, Manchester.
August 31st, 1932.

MEMBERSHIP FORMS.

INDIVIDUAL.

*To the General Secretary, National Smoke Abatement Society
23, King Street, Manchester.*

Kindly admit the undersigned as a Member/an Associate of
the Society. A first Annual Subscription is enclosed, to date
from 193.....

Signed

Address in full.....
.....
.....

Minimum Subscription for members
(including Journal) 10/6.
Associate Subscription 5/-.
Life Membership Subscription £25.

COMMERCIAL FIRMS AND AFFILIATED MEMBERS.

(See Constitution, Sections 3 and 4).

*To the General Secretary, National Smoke Abatement Society
23, King Street, Manchester.*

Kindly admit the undersigned as a member of the Society.
A first Annual Subscription of £ : : is enclosed,
to date from 193.....

Signed

On behalf of

Address

Representative(s) appointed

Address Communications to { Firm
Representative.

Minimum Subscription, One Guinea.

DONATION FORM.

*To the General Secretary, National Smoke Abatement Society,
23, King Street, Manchester.*

I enclose £..... as a donation to the Society, and
would be pleased to receive notices, literature, etc., from time
to time. (Delete latter clause if desired).

Signed

Address

.....

.....



To be forwarded to the Society.

BANK ORDER FORM.

To the Manager,

The Bank.

Please pay the sum of £ : : immediately
and on the same date in each succeeding year until further notice,
to the credit of the NATIONAL SMOKE ABATEMENT SOCIETY, with
the Manchester and County Bank Ltd., 55, King Street, Manchester.

Signed

Address

.....

.....

Date.....193.....



FORM OF BEQUEST.

“I give free of duty to the National Smoke Abatement Society
of 23, King Street, Manchester, the sum of £.....to be
applied to the general purposes of the said Society, and I declare
that the receipt of the Treasurer for the time being shall be a
sufficient discharge to my Executors for the same.”

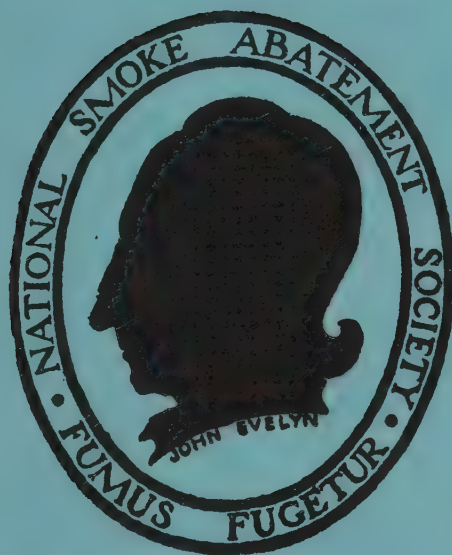
A WILL TO ABATE SMOKE

is present with a large, and growing number of people. It is, however, not yet capable of achievement, and . . . further hard work, education, and propaganda needs to be done. The present limited resources of the Society permit only a fraction of the work that is possible. Your help in obtaining more subscriptions and donations is therefore respectfully solicited, and, in particular, we would stress the value of the Legacy. May we suggest that yours, at least to some extent, is

A WILL TO ABATE SMOKE

C 32

The National Smoke Abatement Society



**FOURTH
ANNUAL
REPORT
1933**

FOURTH ANNUAL REPORT

of the

National Smoke Abatement Society

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1 9 3 3

23 KING STREET
MANCHESTER

National Smoke Abatement Society

President : H. A. DES VOEUX, M.D.

Chairman and Hon. Treasurer : Alderman WILL MELLAND, M.A., J.P.

Hon. Advisory Secretary Sir LAWRENCE CHUBB.

Standing Counsel : RANDOLPH A. GLEN.

General Secretary and Editor : ARNOLD MARSH, M.Sc.Tech., M.Inst.F.

Vice-Presidents :

H.R.H. the Princess Louise, Duchess of Argyll.	Sir Oliver Lodge, F.R.S., D.Sc.
The Rt. Hon. the Earl of Stamford.	Sir Napier Shaw, Sc.D., F.R.S.
The Rt. Rev. the Lord Bishop of London, P.C., K.C.V.O., D.D.	Sir Ernest Simon.
The Rt. Hon. Lord Newton, P.C.	Prof. J. B. Cohen, Ph.D., D.Sc., LL.D., F.R.S.
The Very Rev. the Dean of Canterbury.	Peter Fyfe.
The Very Rev. the Dean of Wells.	Coun. W. E. Hincks, J.P.
Sir Frank Baines, K.C.V.O., C.B.E., F.R.I.B.A.	Dr. J. Johnstone Jervis, M.D., D.P.H.
Sir Thomas Barlow, Bart., K.C.V.O., F.R.S.	Coun. W. Brownhill Smith, M.V.O., O.B.E., D.L.

Elected Members of the Council.

Mrs. M. A. Cloudesley Brereton.	Dr. R. Lessing, Ph.D., F.C.S.
W. D. Caroe, F.S.A.	Major A. J. Martin, M.Inst.C.E.
The Rt. Hon. the Viscount Doneraile.	Dr. F. N. K. Menzies, M.D., F.R.C.P. Edin.
Dr. Margaret Fishenden, D.Sc., F. Inst. P.	Dr. H. Osborne, M.D., M.R.C.S.
A. Lindsay Forster.	Major General S. H. Powell.
Sir Francis Fremantle, C.B.E., J.P., M.P.	Professor C. H. Reilly, O.B.E., M.A., F.R.I.B.A.
Randolph A. Glen.	A. E. Tanner.
Sir Francis Goodenough, C.B.E.	W. Tapper, A.R.A., F.R.I.B.A.
Mrs. Mary Higgs.	Captain J. Bell White.

Executive Committee :

Alderman David Adams, J.P.	A. L. Holton.
Councillor W. Asbury.	Dr. J. Johnstone Jervis, M.D., D.P.H.
Dr. J. R. Ashworth, D.Sc.	Councillor C. E. Keene.
J. W. Beaumont, M.R.S.I.	A. McCulloch, M.Sc. Tech.
Dr. Matthew Burn.	W. B. McLusky.
Dr. R. Veitch Clark, M.A., B.Sc., M.B., Ch.B., D.P.H.	Alderman W. Muirhead.
R. H. Clayton, B.Sc.	E. W. L. Nicol, Assoc.Inst.C.E., M.I.Mar.E., A.M.I.E.E.
Miss M. Fitzgerald.	J. A. Robinson, F.S.I.A.
Dr. W. M. Frazer, M.D., M.Sc., D.P.H.	Dr. E. W. Smith.
Charles Gandy.	Dr. E. H. Walker, M.B., Ch.B., D.P.H.

Scottish Branch Representatives :—

Coun. W. Brownhill Smith. Bailie Alex Munro. Allan Stevenson.

Affiliated Societies and Representatives Appointed to the Council :

BEAUTIFUL OLDHAM SOCIETY.—Mrs. Mary Higgs, A. Arthurs.

BRITISH MEDICAL ASSOCIATION.—Dr. G. Clark Trotter, M. Bishop Harman, LL.D., F.R.C.S.

COKE OVEN MANAGERS' ASSOCIATION.—F. T. Hatswell, Geo. T. Purves.

DENTAL ASSOCIATION.—A. E. Rowlett.

INSTITUTE OF FUEL.—E. W. L. Nicol, Assoc. Inst. C.E., M.Inst. Mar.E., A.M.I.E.E.

INSTITUTION OF ELECTRICAL ENGINEERS.—W. C. P. Tapper, Lt.-Col. W. A. Vignoles, D.S.O., M.I.E.E.

INSTITUTION OF GAS ENGINEERS.—Charles F. Botley, Edward Crowther.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS.—Walter Yates, Frank Biggin.

SANITARY INSPECTORS' ASSOCIATION.—Fred Pollard.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.—Dr. Cyril Banks, M.B., B.S., D.P.H., Dr. T. W. Naylor Barlow, M.R.C.S., L.R.C.P., D.P.H., O.B.E., F.R.S. Edin.

*Affiliated Local Authorities and Representatives
Appointed to the Council :*

BARNOLDSWICK.—

BINGLEY.—W. E. Cooke.

BIRKENHEAD.—

BIRMINGHAM.—Alderman Lucas, Dr. Matthew Burn (Executive).

BOOTLE.—Alderman Turner, Dr. F. T. H. Wood, O.B.E.

BRIGHTON.—Councillor E. Denne, Alderman H. M. Black, J.P.

BRISTOL.—Alderman J. E. Jones, J.P., Mr. J. A. Robinson, F.S.I.A. (Executive).

BURNLEY.—Alderman Lees, J.P., Councillor Munro.

BURY.—Councillor Pickles, Councillor Steen.

BUXTON.—Mr. W. O. Coates.

CARDIFF.—Alderman John Donovan, C.B.E., J.P., Dr. Ralph M. F. Picken, B.Sc., M.B., Ch.B., D.P.H.

CHESTER.—

DARLINGTON.—Alderman D. L. Fisher, D.S.O., J.P., Alderman A. J. Best.

DARWEN.—

DONCASTER.—Councillor T. Gilberthorpe, J.P., Dr. D. L. Anderson, M.D., L.R.C.P., D.P.H.

EALING.—Dr. Thomas Orr, M.D., D.Sc.

EAST RETFORD.—

EDMONTON.—Councillor H. Barrass, J.P., Councillor T. J. Dibbens.

FAILSWORTH.—

FARNWORTH.—Councillor Rev. J. Wilcockson, Councillor R. H. Cunliffe, J.P.

FINSBURY.—

HALIFAX.—Dr. C. G. F. Roe, L.R.C.P. & S., L.M., D.P.H., D.P.M., J. W. Beaumont, M.R.S.I. (Executive).

HARROGATE.—

HOLBORN.—

HORWICH.—

HUDDERSFIELD.—Councillor F. I. Butterworth, J.P.

IRLAM.—Councillor H. Jones, Mr. Robert Rutter.

KINGSTON-UPON-HULL.—Alderman W. Turner, Alderman F. E. Woodliffe.

LAMBETH.—Alderman W. G. Geary, Dr. A. G. G. Thompson.

LEEDS.—Dr. J. Johnstone Jervis (Executive), Mr. J. V. Gray.

LEICESTER.—Councillor C. E. Keene.

LINCOLN.—Dr. Mohan Lal Bery, M.B., Ch.B., D.P.H., Mr. D. G. McGill, M.S.I.A.

LIVERPOOL.—Alderman William Muirhead, Dr. W. M. Frazer, M.D., M.Sc., D.P.H.

MANCHESTER.—Alderman Jackson, J.P., Councillor James.

MANSFIELD.—

MIRFIELD.—Councillor A. Kilner, Councillor Hallas Lockwood.

NEWCASTLE-UPON-TYNE.—Councillor W. Thompson, Alderman David Adams, J.P. (Executive).

NOTTINGHAM.—

OLDHAM.—Councillor T. Wrigley, J.P.

POPLAR.—Councillor G. Anderson, Councillor G. J. Cressall, J.P.

PRESTON.—

RADCLIFFE.—

RICHMOND, Surrey.—Dr. C. S. Brebner, M.D., D.S.O., Mr. George Laws.

ROCHDALE.—Alderman Edward Thomas, J.P., Dr. Andrew Topping, M.D.

ROYTON.—Mr. Ellis Harrison, Councillor T. H. Lowe.

SALFORD.—

SHEFFIELD, ROTHERHAM AND DISTRICT JOINT COMMITTEE.—Councillor W. Asbury (Executive).

SMETHWICK.—Councillor T. C. McKenzie, M.D.

STALYBRIDGE.—Alderman Potts, Councillor Britnor.

ST. HELENS.—Alderman T. Hamblett, J.P., Dr. Frank Hauxwell.

STOKE-UPON-TRENT.—

STRET福德.—Councillor J. W. Dorran, Dr. E. H. Walker, M.B., Ch.B., D.P.H. (Executive).

SUNDERLAND.—Dr. I. W. Modlin, Councillor E. W. Pitchburn.

SWANSEA.—

TOTTENHAM.—Chairman of Health Committee, Medical Officer of Health.

WAKEFIELD.—Alderman S. Butterworth, Mr. E. Dickenson.

WALLASEY.—Dr. T. W. Naylor Barlow, Alderman D. P. Charlesworth.

WALSALL.—Alderman Henry Hucker, J.P., Dr. J. A. M. Clark, M.D., M.B., Ch.B., D.P.H.

WARRINGTON.—

WESTMINSTER.—Dr. A. J. Shinnie, Councillor Mrs. Alderson Horne.

WIDNES.—Councillor T. Smith, Councillor E. Hesketh.

WILLESDEN.—

WOLVERHAMPTON.—Dr. R. H. H. Jolly, M.D., D.P.H.

WREXHAM.—

YORK.—

Honorary Advisors :

ATMOSPHERIC POLLUTION.—Sir Napier Shaw and Dr. J. S. Owens.

LEGISLATION.—Mr. Randolph Glen.

HEALTH.—Sir Leonard Hill, Professor P. S. Lelean, and Dr. F. N. K. Menzies.

STEAM RAISING PROCESSES.—Messrs. J. B. Jones, E. W. L. Nicol, and H. L. Pirie.

METALLURGICAL PROCESSES.—Mr. E. C. Evans.

DOMESTIC HEATING.—Dr. Margaret Fishenden.

GAS INDUSTRY.—Sir Francis Goodenough, and Dr. E. W. Smith.

ELECTRICAL INDUSTRY.—Mr. A. P. M. Fleming, and Lt.-Col. W. A. Vignoles.

HON. AMERICAN CORRESPONDENT.—Mr. H. B. Meller, Pittsburgh.

Information Concerning the Society.

The National Smoke Abatement Society was formed in 1929 by the amalgamation of the Coal Smoke Abatement Society (1899) and the Smoke Abatement League of Great Britain (1909). It is an organization dependent entirely upon voluntary support, and its objects and the conditions of membership will be found in the constitution, on another page.

Offices.—Central (General Secretary's) Offices : 23, King Street, Manchester, 2. Tel. : BLAckfriars 0896.

London Office : 71, Eccleston Square, S.W.1. Tel. Victoria 9274

Scottish Branch : City Chambers, Glasgow.

Lectures.—The Society will endeavour to supply lecturers on smoke abatement in any part of the country. As a rule, the only charge is for the travelling expenses of the lecturer. The services of the Secretary of the Society are generally available for lectures.

Exhibits.—The Society is prepared to loan smoke abatement exhibits, suitable for use at health and other exhibitions, free of charge ; or to take and equip stands at such exhibitions. A list of exhibits available will be sent on request.

Lantern Slides.—The Society possesses a large number of lantern slides dealing with various aspects of smoke abatement. These will be loaned for the use of lecturers at a charge of one penny per slide, plus postages. A catalogue of the slides will be sent on request.

Posters.—Slogan posters, size 30 in. by 20 in., four kinds, printed black and green, can be purchased at 4d. each.

Shade Cards for Smoke Inspection.—Tinted shade cards, showing different densities of smoke, of which the denser tints have been adopted as nuisances by magistrates hearing coal smoke complaints, are available at a price of 6d. each.

Information and Advice.—The Society is glad, at any time, to be of assistance to any person requiring information on smoke abatement and related matters. Inquiries should be addressed to the General Secretary, at 23, King Street, Manchester.

List of Publications.

(All prices include postage. Reduced prices for quantities).

The Smoke Abatement Handbook. A recently published *vademecum* on all aspects of the smoke nuisance and its abatement. Contains authoritative articles, numerous statistics, and a variety of interesting facts. Indispensable to all who are concerned with the subject. 8vo. pp. 48. 6d, 5/- per dozen copies.

The Journal of the National Smoke Abatement Society. Published quarterly. Is not a record of proceedings but a magazine—the only one in the world—devoted to the problems of atmospheric pollution. Contains authoritative articles, notes on technical methods, news of activities of every kind, and in general keeps the reader up-to-date in every aspect of the subject. Per annum 2/6. Gratis to members.

Fumifugium ; or the Smoake of London Dissipated, by John Evelyn. This rare and fascinating book; first published in 1661 by command of Charles II., has just been republished by the Society with an introduction by Miss Rose Macaulay. It is illustrated with original wood engravings and a portrait of Evelyn. Paper covers 6d., cloth bound 1/6.

Home Fires Without Smoke. Edited by Cyril Elliott and Marion Fitzgerald. 8vo. pp. 59. 2/- and 3/6 (cloth).

Smoke and Fumes Nuisances from Road Vehicles. Technical and scientific aspects by Dr. J. S. Owens, A.M.Inst.C.E., M.I.Mech.E.; and the legal position by R. P. Mahaffy, M.A. 8vo. pp. 16. 3d.

Smoke and Health. By Dr. J. S. Taylor, M.D., D.P.H., Assistant Medical Officer of Health, Manchester. 8vo. pp. 12. 2d.

Smoke Abatement in Salt Lake City, Utah. A full and illuminating report of the intensive and successful campaign in Salt Lake City. 8vo. pp. 43. 3d.

N.S.A.S. Annual Reports. Gratis, by post 1d.

Conference Reports and Proceedings :

Report of the 1924 Conference. Only a few copies of a valuable report. 21 papers in full. 8vo. pp. 308. 5/-.

Report of the 1926 Conference. 10 papers in full. 4to. pp. 98. 1/-.

Proceedings of the Newcastle Conference, 1932. Containing the Presidential address, papers by R. A. Mott, on "The Domestic Smoke Problem: the Possibilities of Coke Oven Fuel"; Alderman David Adams, on "The Psychological Effects of Smoke"; A. E. Crossley, on "The Human Element: A Factor in Smoke Abatement." With discussions. 8vo. pp. 63. 1/-.

Proceedings of the Sheffield Conference, 1933. Containing the Presidential address, resolutions adopted, papers by Councillor W. Asbury, on "The Five Years Clause and other Matters arising from the Public Health (Smoke Abatement) Act, 1926"; Mrs. Millicent Jast, on "How the Citizen Takes the Air—the Personal Significance of the Coal Smoke Problem"; Messrs. R. H. Clayton and Charles Gandy, on "The Combating of Domestic Smoke in Industrial Areas." Ready immediately. 8vo. 1/-.

Separate Conference Papers :

- "The Progress of the Electrical Grid," by Robert Blackmore, M.I.E.E. 3d.
- "The Production and Use of the New Smokeless Fuel 'Dryco' in Liverpool," by Ralph E. Gibson, M.Inst.C.E., M.Inst.GasE. 3d.
- "Atmospheric Pollution as Affecting Visibility and Visibility as Affecting Aviation," by Messrs. M. G. Bennett, M.Sc., and F. Entwistle, B.Sc., of the Meteorological Office. 3d.
- "The Influence of Air Pollution upon Vegetation," by W. W. Pettigrew, V.M.H. 6d.
- "The Complete Gasification of Coal," by T. R. Wollaston, M.I.Mech.E. 3d.
- "The Fuel of the Future," by Sir Francis Goodenough. 3d.
- "Powdered Fuel and the Smoke Problem," by Dr. J. T. Dunn, D.Sc., F.I.C. 3d.
- "How Electricity Can Help in Abating Smoke," by Julius Frith, M.Sc., M.I.E.E. 3d.
- "Power from Sources other than Coal," by Prof. Miles Walker, M.A., D.Sc. 3d.
- "Furnace and Tank Boiler Design," by W. H. Casmey. 3d.
- "The Smoke Inspector and the Cost of Production," by H. G. Clinch, M.R.San.I., M.I.H. 3d.

Published by other Organizations :

- "Clear Air for Leeds." pp. 52. (Leeds Tercentenary Committee). 3d.
- "Smoke Abatement and Fuel Economy in Steam Boiler Practice." (Manchester and District Regional Smoke Abatement Committee). pp. 11. 1d., post 2d.
- "The Open Fire." (Manchester Air Pollution Board). 1d., post 2d.
- "The Black Smoke Tax." Report of an extensive investigation into the cost of smoke in Manchester. (Manchester Air Pollution Board). 1d., post 2d.

Ready Shortly :

- "Proceedings of the Sheffield Conference, 1933."
- "The English Law Relating to Air Pollution," by Randolph A. Glen.
Also an entirely new pamphlet for general distribution on the domestic smoke problem and smokeless methods.

CONSTITUTION OF THE SOCIETY.

1. **NAME.**—The Society shall be called the NATIONAL SMOKE ABATEMENT SOCIETY.

2. **OBJECTS.**—The Society shall be concerned with the prevention of air pollution generally, and in particular, that arising from coal smoke.

The objects of the Society shall be :—

- (a) To create an informed public opinion on the evils of air pollution.
- (b) To inquire into, and if thought advisable, assist investigations directed towards the abolition of smoke, whether industrial or domestic.
- (c) To take steps to popularize the use of smokeless methods of heat and power production.
- (d) To promote and support legislation for preventing the pollution of the atmosphere.

3. **MEMBERSHIP.**—The Society shall consist of :—

- (a) Life Members.
- (b) Members.
- (c) Associates.
- (d) Affiliated Members.

Life Members.—A donation of not less than twenty-five guineas paid in one amount by any individual, shall constitute the donor a member for life.

Members.—An Annual Subscription of not less than half a guinea in the case of an individual, or one guinea in the case of a commercial firm, shall constitute the subscriber a member. A commercial firm registered as a member shall be entitled to nominate a representative to exercise the privileges of membership as regards attendance at meetings, voting, etc.

Associates.—An Annual Subscription of not less than five shillings shall constitute that subscriber an Associate.

Affiliated Members.—The payment of not less than one guinea by any Local Authority, Society or Institution, shall constitute the subscribing body an Affiliated Member. The affiliated Member shall be entitled to appoint two representatives to the Council of the Society, who shall receive the privileges of full membership of the Society.

4. **PRIVILEGES OF MEMBERSHIP.**—The privileges of membership shall include :—

- (a) Advice and assistance in questions relating to smoke abatement and fuel economy as far as the circumstances of the Society will permit.
- (b) Free admission to lectures arranged by the Society.
- (c) The right to receive free of cost, the general publications of the Society as they appear, including the Journal of the Society. Associates shall not, however, receive the Journal and such other literature as may be decided upon from time to time.

5. **THE COUNCIL.**—The Council of the Society shall consist of the Officers, the members of the Executive Committee, two representatives from each Affiliated Member, together with not more than thirty members to be elected annually at the General Meeting.

The business of the Council shall be to direct the policy of the Society in general and to receive any periodical reports from the Executive or other committee.

The Council shall meet at least twice a year, of which at least one meeting shall take place in London.

6. **THE EXECUTIVE COMMITTEE.**—The Executive Committee shall consist of the Officers and not less than twelve members or representatives of Affiliated members, who shall be elected annually at the General Meeting of the Society. The Executive Committee shall have power to appoint sub-committees, and to co-opt additional members. Five shall form a quorum.

The Committee shall meet as required, and the place of meeting shall be at the central offices of the Society, or other place at the discretion of the Committee.

The business of the Committee shall be to manage the affairs of the Society.

7. **OFFICERS.**—The Officers of the Society shall be President, Vice-President and Honorary Treasurer, to be elected annually. The Chairman of the Committee and of the Council, shall also be Officers, but shall be elected by their respective Committees.

8.—**GENERAL MEETING.**—The General Meeting of the Society shall be held annually at which shall be presented the Annual Report and the Audited Financial Statement, and at which the Officers, the Council and the Executive Committee for the following year shall be elected. Other general meetings shall be held on the requisition of the Council or Executive Committee, or of 20 members of the Society. One month's notice shall be given of all General Meetings.

9. ALTERATION TO CONSTITUTION.—No change shall be made in the constitution of the Society, except by a two-thirds majority of the members present and voting at the Annual Meeting or at a Meeting called specially for the purpose. A notice in writing of any resolution to be submitted for this purpose must be sent to all members of the Society at least a fortnight before the Annual or Special General Meeting.

10. ACCOUNTS.—Accounts shall be kept of all moneys received and expended by the Society, and once at least every year the accounts of the Society shall be examined and the correctness thereof certified by a qualified auditor.

11. BRANCHES.—Branches of the Society shall be constituted, as far as possible, in the town or districts of the United Kingdom, to deal with local smoke abatement and air pollution problems. Branches shall settle their own constitution and terms of membership, but shall pay an affiliation fee of at least sixpence for every individual member and of two shillings and sixpence for every firm affiliated to the National Society, except in the case of members who are also members of the National Society. Members of the Branches who are not also members of the National Society shall be entitled to attend the General and other meetings of the Society, but shall not be entitled to vote thereat. The Branch shall, however, appoint two delegates to the Council of the National Society and to the Annual General Meeting, who shall have full voting powers.

12. JOURNAL AND LITERATURE.—A copy of each issue of the Journal of the Society, together with all other current general literature shall be sent free to each member and delegate from each Affiliated member ; to the Town Clerk of each affiliated Local Authority, and to the Secretary of each affiliated Society or Institution.

13. INTERPRETATION OF CONSTITUTION.—The interpretation of these rules together with any question on which the rules are silent shall be decided by the Executive Committee until the next Annual General Meeting.

FOURTH ANNUAL REPORT

for the Year ended June 30th, 1933.

General Review.—It is gratifying to be able to record that once again, in spite of the adverse circumstances that face every voluntary organization, the financial support given to the Society has been slightly increased. The activities undertaken have also been extended, and the year under review has probably been the busiest in the Society's existence.

Apart from the Society's own work general interest in the subject appears to be growing. It was, as is recorded later, an important section of the Public Health Congress in London, in November, 1932 ; it was discussed at the Eastbourne Congress of the Royal Institute of Public Health ; and entered several times in the discussions of the Royal Sanitary Institute Congress at Blackpool, including the Presidential address by Lord Cozens-Hardy. H.R.H. Prince George, opening a new gasworks at Oldham, said : "Atmospheric pollution is one of the greatest evils that menace our national health. Smokeless households and clean factories run on scientific lines mean clean, healthy towns, free from smoke and the diseases it induces."

Apart from these meetings reports have been received of seventeen other meetings and conferences during the year at which smoke abatement has been the principle topic or has entered into the discussion.

A tribute to the work of the National Smoke Abatement Society in creating a public opinion opposed to the present conditions was paid by Mr. Ralph E. Gibson in his Presidential address to the Institution of Gas Engineers at Liverpool.

The Scottish Branch of the Society held its annual meeting in Edinburgh, on June 9th, 1933, at which papers were read by Professor Wm. Oliver on "Pointers for Smoke Elimination" and by Mrs. Bailie Somerville on "Can the Infant Death Rate be Further Reduced by Concentration on the Abatement of Smoke ?" The programme also included a discussion, introduced by Mr. T. M. Ashford, on "Smoke and Steam from Vehicles on Streets and Roads." The following resolution was proposed and adopted :—

"That the Minister of Transport be respectfully requested to take the necessary steps to amend Regulation No. 18 of the Statutory Rules and Orders, 1931, made under the powers conferred upon him by the Road Traffic Act, 1930,

by inserting after the word 'fuel,' occurring in said regulation, the words '*shall use only smokeless or non-bituminous fuel and*.' "

The regulation referred to in this resolution, and as proposed to be amended, would read as follows :—

"18. Every motor vehicle using solid fuel *shall use only smokeless or non-bituminous fuel, and* shall be fitted with an efficient appliance for the purpose of preventing the emission of sparks or grit, and also with a tray or shield to prevent the ashes and cinders from falling on to the road."

The Annual Report of the Scottish Branch states that the classes for firemen were carried on during the Winter and that ninety-two students were enrolled. A paragraph of special interest in the report is as follows :—

"The regulations made by the Minister of Transport about three years ago have proved of great benefit to the public in restricting the amount of smoke and steam from vehicles on streets and roads. In Glasgow there have been twenty-seven prosecutions during the past year, with the result that much greater care is now taken by the drivers of steam-driven vehicles, and offences are now much less frequent."

The Regional Smoke Abatement Committees have continued their activities, and are, among other matters, especially interested in the question of classes for boilermen and the issue of certificates for proficiency. As reported below, new Advisory Committees have been formed during the year in the Liverpool and Newcastle-upon-Tyne districts.

The Newcastle Conference.—The fourth Annual Meeting and Conference was held, by invitation of the Corporation, at Newcastle-upon-Tyne, on September 23rd, 24th and 25th. The conference was well attended by members, delegates and local people interested in the subjects discussed. The papers read were as follows : "The Domestic Smoke Problem: the Possibilities of Coke Oven Fuel," by Mr. R. A. Mott, M.Sc., F.I.C., of the Department of Fuel Technology, University of Sheffield ; "The Psychological Effects of Smoke," by Alderman David Adams, J.P., Chairman of the Newcastle Public Health Committee ; and "The Human Factor in Smoke Abatement," by Mr. A. E. Crossley, Senior Smoke Inspector, Manchester. For the first time at these annual conferences, the *Proceedings*, with papers and discussions in full, were subsequently issued in volume form.

During the conference a visit was paid to the Roman Wall at Borcovicus, with lunch at Chollerford, and tea, on the return journey, at Hexham. This exceptionally interesting and enjoyable tour was by invitation of the Newcastle Corporation, which also arranged a tour on the Sunday afternoon to the coast.

1933 Conference.—An invitation was received from the Sheffield, Rotherham and District Smoke Abatement Committee to hold the 1933 Conference in Sheffield. The invitation was gratefully accepted by the Executive Committee.

Public Health Congress.—The Society was invited to participate in the Public Health Congress which was held in London in November, 1932. The invitation was accepted, and the morning session of the Congress, on Tuesday, November 15th, was under the auspices of the Society. The Rt. Hon. Mr. Arthur Greenwood, late Minister of Health, presided, and papers were read by Dr. H. A. Des Voeux on "Smoke and Public Health," and by Dr. J. S. Owens on "Smoke and Fumes Nuisances from Road Vehicles." The meeting was well attended and in every way successful.

Memorandum on Regional Organization.—As the memorandum circulated to local authorities in 1932, urging the formation of Statutory Smoke Abatement Committees, had shown that there was little likelihood of the formation of such bodies at the present time, it was resolved at the meeting of the Council, held in London on June 3rd, 1932, that a statement be issued to local authorities on the subject of Advisory Regional organization. A printed memorandum was accordingly drawn up and circulated to the Medical Officers of Health and Clerks of one hundred and thirty local authorities in districts suitable for the formation of further Advisory Regional Committees. The memorandum outlined the constitution and functions of these bodies, drew attention to the existing Committees and their work, and suggested the areas in which new Committees could be formed. This was printed in full in the issue of the *Journal* for Winter, 1933.

As a result of this memorandum conferences of local authorities were convened by the corporations of Liverpool and Newcastle-upon-Tyne, each concluding with a resolution forming a Committee for the respective areas, viz., Merseyside and South-west Lancashire, and Northumberland and Durham.

It does not appear probable that Committees will be formed in the other districts suggested, namely, Tees-side, North-east Lancashire and the Potteries. It is disappointing to record that no intimation has been received that the memorandum has even been considered by any of the authorities in the last named district—one of the smokiest areas in the country.

Classes for Boilermen.—The possibility of co-ordinating existing classes for boilermen and the issue of a national certificate was discussed by the Executive Committee. Following a decision to consider the question further, a joint meeting of representatives of the Regional Committees and the Society was held. Later, the question was considered by representatives of a number of interested organizations, including this Society, when it was agreed that the City and Guilds of London Institute be approached to ascertain whether the co-ordination of classes and certificates could be arranged under the auspices of that body. As a result of these meetings and discussions it has now been arranged for the City and Guilds Institute to convene an "Exploratory Committee" comprising representatives of interested organizations and existing classes. This Committee has not yet met, but it is hoped that early progress will be made towards achieving a most important and desirable objective.

Fumifugium.—The publication of the pamphlet on smoke abatement by John Evelyn, the diarist, called "Fumifugium," first issued in 1661, has been one of the Society's notable activities of the year under review. The value of the publication was enhanced by a foreword by the eminent author, Miss Rose Macaulay, to whom our thanks are due.

The pamphlet was published at 1s. 6d. in cloth boards and at 6d. in paper covers. Over 2,000 copies have been sold and distributed at the end of the period of this report, and seventy press reviews and notices, all commendatory, have been received.

National Council of Women.—At the Annual Meeting of the Society at Newcastle it was resolved that steps be taken to make contact with women's organizations. As a result of this the Society has become affiliated to the National Council of Women of Great Britain, and will appoint representatives to the Household Service and Public Health sections of the Council. On May 11th, 1933, the Secretary of the Society addressed the members of the Household Service section upon domestic smoke abatement.

Eastbourne Public Health Congress.—A paper on the smoke problem was presented to the Eastbourne Congress of the Royal Institute of Public Health by the Chairman of the Society, Alderman Will Melland, M.A., J.P., on June 1st, 1933.

Exhibitions and Exhibits.—The Society has had stands in health exhibitions during the year at Barnsley, Stockport, Loughborough and the "Better Housing" Exhibition in Manchester. Exhibits have also been loaned to local authorities and others for use in exhibitions at Bolton, Clevedon, Halesowen, Keighley, Bingley, Grimsby and Belfast.

Several new exhibits have been prepared, which seek to illustrate some aspect of the smoke nuisance in an easily understood and graphic manner. Three pieces of stonework, showing smoke erosion, have been obtained from the demolished portions of the Houses of Parliament, and have been suitably mounted. There is considerable scope for the extension of this side of propaganda work.

“Emblem.”—As will be seen from the cover of this report and other publications, the Society has adopted an emblem or device consisting of a silhouette head of John Evelyn, surrounded by the name of the Society, and the motto “Fumus Fugetur.” Numerous other emblems have been considered in the past without finding one really suitable for the purpose. The use of the head of the famous pioneer of Smoke Abatement was, however, considered to be both fitting and distinctive.

Publications.—As already mentioned, the chief publications during the year have been “Fumifugium” and the Proceedings of the Newcastle Conference. The *Journal* continues to be published through the agency of the Service Guild, and has now been issued regularly for three and a half years.

Press.—New arrangements for press services have been made, and in consequence the press has been regularly informed of the Society’s activities. Our thanks are due to the daily newspapers and technical and trade periodicals for the interest they show, in general, in smoke abatement and the work of the Society.

The following table analyses the reports and notices published in the press for the period under review:—

	<i>Number of Cuttings</i>		
Annual Conference, Newcastle	230
Public Health Congress, London	61
Memorandum on Regional Organization and subsequent Meetings, etc.	78
Reviews of the <i>Journal</i>	20
National Council of Women Meeting	51
Eastbourne Public Health Congress	11
“Fumifugium”	70
Housing Exhibition, Manchester	5
Letters “to the Editor”	14
Miscellaneous	23
Total	563

These were divided among the different classes of paper as follows:—

London "National" dailies	...	...	...	54
Provincial dailies	...	...	...	340
Trade and Technical press	...	...	...	169

It will be agreed that these figures are excellent and represent much valuable publicity.

John W. Graham.—It is with deep regret that we record the death of John W. Graham, for many years Chairman, and then President, of the Smoke Abatement League of Great Britain. Mr. Graham had retired from active work when the National Smoke Abatement Society was formed, but he became one of its most honoured Vice-Presidents. He was a tireless speaker and writer on smoke abatement, and was indefatigable in his demands for new legislation shortly before the war, and then afterwards, until the new Act was passed in 1926.

"Standing Counsel."—Mr. Randolph A. Glen has kindly accepted the position of Standing Counsel to the Society, and has also consented to prepare a new pamphlet on the English Law relating to Smoke Emission. Our thanks are due to Mr. Glen for his valuable services to the Society.

Finance.—The statement of accounts shows that there has been an increase in the Society's income compared with the previous year ; a result that, in view of the difficulties, is most satisfactory. Expenses have been carefully watched, and against them must be noted the larger receipts for the sale of literature. A special donation of £100 was received by the Society as a result of the dissolution of the Manchester and Salford Sanitary Association, and our thanks are due for this to the Committee of the Association.

If the present income could be doubled the activities of the Society could at least be trebled, as, of course, a greater proportion, if not all, the additional income would be expended directly upon the activities undertaken, and would not be absorbed by salaries, rents and other fixed charges as much as the present sum has to be. For this reason we ask all members and representatives to assist us, first in maintaining the existing income and then increasing it with ever growing advantage.

WILL MELLAND, *Chairman.*

ARNOLD MARSH, *General Secretary.*

SUBSCRIPTIONS AND DONATIONS

for the year ended June 30th, 1933.

Name	Town	Subscriptions			Donations		
		£	s.	d.	£	s.	d.
Acworth, A. W.	London	0	10	6	—		
Acworth, Miss E. A.	London	1	1	0	—		
Acworth, W. B.	London	2	2	0	—		
Affleck & Brown	Manchester	2	2	0	—		
Altrincham Gas Co.		1	1	0	—		
Anonymous	Manchester	—			20	0	0
Arning, A. W.	Manchester	1	0	0	—		
Ashton Bros.	Manchester	2	2	0	—		
Ashton, Hoare & Co.	Manchester	1	1	0	—		
Ashton, Miss M.	Manchester	1	1	0	—		
Atkinson, Mrs.	London	25	0	0	—		
Banbury Gas Company		1	1	0	—		
Barbour, R. & Co.	Manchester	2	2	0	—		
Barker, K.	Manchester	0	10	0	—		
Barker, S.	Manchester	0	10	0	—		
Barlow & Jones Ltd.	Manchester	2	2	0	—		
Barlow, Sir T. Bart.	London	0	10	6	—		
Bath Gas Company		1	1	0	—		
Baxendale & Co.	Manchester	2	2	0	—		
Beard, E.	Manchester	1	1	0	—		
Beautiful Oldham Society		1	1	0	—		
Beckwith, J.	London	1	1	0	—		
Bell White, Captain J.	London	1	1	0	—		
Bennett, Dr. J.	Warrington	0	10	6	—		
Bibby, Mr. and Mrs. H. P.	Birkenhead	—			2	0	0
Bibby & Sons Ltd.	Liverpool	5	0	0	—		
Bingley U.D.C.		1	1	0	—		
Birkenhead Corporation		2	2	0	—		
Birmingham Corp. Gas Dept....		5	5	0	—		
Blyth Gas Company		1	1	0	—		
Bognor Gas & Electricity Co....		1	1	0	—		
Bootle Corporation		5	5	0	—		
Bournemouth Gas & Water Co.		2	2	0	—		
Bracey, Dr. H.	Birmingham	0	10	6	—		
Bradford Corpation Gas Dept....		1	1	0	—		
Bray, George & Co.	Leeds.....	1	1	0	—		
Briggs, C. H.	London	0	10	6	—		
Brighton Corporation		1	1	0	—		
Brighton, Hove and Worthing Gas Company		3	3	0	—		
Brighthouse Corporation Gas Com.		2	0	0	—		
Bristol Corporation		5	5	0	—		
Bristol Gas Company		5	5	0	—		
British Commercial Gas Assoc.	London	50	0	0	—		
British Dental Association	London	1	1	0	—		
British Elec. and Allied Man- ufacturers' Association	London	—			10	10	0

Name	Town	Subscrip- tions	Dona- tions
British Electrical Development Association	London	—	50 0 0
British Gas Light Co. Ltd.	London	2 2 0	—
British Medical Association ...	London	1 1 0	—
Brown, J. P.	Bolton	0 10 6	—
Brownlie, D.	London	0 10 6	—
Burnley Corporation.....		2 2 0	—
Burnley Corporation Gas Dept.		1 1 0	—
Bury Corporation		2 2 0	—
Buxton Corporation		1 1 0	—
Cable Makers' Association	London	—	10 10 0
Cadbury Bros.	Bournville	2 2 0	—
Calverley and Horsforth Dist. Gas Company		1 0 0	—
Cambridge University and Town Gas Light Company		1 1 0	—
Capper-Johnson, Dr. L.	London	0 10 6	—
Cardiff Corporation		1 1 0	—
Cardiff Gas Light and Coke Co.		1 1 0	—
Caroe, W. D.	London	1 0 0	—
Carr, J. D.	Manchester	1 0 0	—
Carter, Sir E. Bonham	London	1 0 0	—
Cawthorn, Miss M.	London	0 10 6	—
Charrington, J., Junr.	London	0 10 6	—
Cheltenham and Dist. Gas Co....		1 1 0	—
Chester Corporation		1 1 0	—
Chester United Gas Company...		2 2 0	—
Claye, Dr. E.	Stockport	0 10 0	—
Clayton, R. H.	Manchester	2 2 0	—
Clegg, E.	Bradford	0 10 6	—
Clevedon Gas Company		1 1 0	—
Clinch, H. G.	West Ham	0 10 6	—
Cohen, J. B.	Coniston	0 10 6	—
Commercial Gas Company	London	5 5 0	—
Cowley, Mrs. Ida M.	Hale	0 10 6	—
Croydon Gas Company		5 5 0	—
D. & I. Smokeless Fuels Ltd....	London	1 1 0	—
Daniels, S. R.	Oxford	0 10 6	—
Darlington Corporation		1 1 0	—
David, R. P.	Wrexham	0 10 6	—
Davidson, W. A.	Manchester	0 10 6	—
Dobson, Dr. J. M. B.	Oxford	1 1 0	—
Doncaster Corporation		1 1 0	—
Dudley, Brierley Hill and District Gas Company		1 1 0	—
Dug uid, Mr. and Mrs. S.	Lymm	1 1 0	—
Ealing Corporation		1 1 0	—
Eastbourne Gas Company		2 2 0	—
East Cowes Gas Company		1 1 0	—
Edmonton U.D.C.		1 1 0	—
Elliott Bros. (London) Ltd.....	London	1 1 0	—
Evans, Mrs. Richardson	London	1 0 0	—
Falk, Stadelmann & Co.	London	1 1 0	—
Failsworth U.D.C.....		1 1 0	—

Name	Town	Subscriptions			Donations
Farnworth U.D.C.....		3	3	0	—
Finsbury Corporation		1	1	0	—
Fitton, Fred A.	Manchester	0	10	6	—
Flugel, Mrs. M.	London	0	10	0	—
Forster, A. Lindsay	Glasgow	1	1	0	—
Foster, Miss K.	Harrogate	0	10	6	—
Fothergill & Harvey	Littleborough	1	1	0	—
Fox, Miss A. S.	London	0	10	6	—
Fox, Frank.....	London	0	10	6	—
Fry, Miss A. Ruth	Thorpeness	1	0	0	—
Fry, Miss Agnes	Bridgwater	0	10	6	—
Gaddum, H. E.	Bowdon	0	10	0	—
Gallenkamp & Co.....	London	1	1	0	—
Gandy, Charles	Manchester	4	4	0	—
Gandy, Mr. and Mrs. Henry ...	Corbridge	1	1	0	—
Ganter, D.	Manchester	0	10	6	—
Gas Chambers and Coke Ovens Ltd.	London	1	1	0	—
Gas Light and Coke Company...	London	52	10	0	—
General Electric Company	London	5	5	0	—
Gibson, Ralph E.	Liverpool	0	10	6	—
Gladstone, Lord	London	1	1	0	—
Gloucester Gas Light Co.		1	1	0	—
Glover & Main Ltd.	London	—			5 5 0
Godalming Gas & Coke Co. ...		1	1	0	—
Godbert, C. W. (1932)	Manchester	1	1	0	—
Godbert, C. W. (1933)	Manchester	1	1	0	—
Goodenough, Sir F.	London	2	2	0	—
Gt. Grimsby Gas Company ...		1	1	0	—
Gt. Yarmouth Gas Company ...		2	2	0	—
Green, J. H.	Wakefield	0	10	6	—
Greg, H. S.	Haverthwaite	0	10	0	—
Guildford Gaslight & Coke Co....		2	2	0	—
Hague, J. H.	Oldham	0	10	6	—
Halifax Corporation		10	10	0	—
Halifax Corporation Gas Dept.		2	2	0	—
Hancock, A.	Manchester	0	10	6	—
Hardy, G. & Co.	Manchester	2	2	0	—
Harrogate Corporation		2	2	0	—
Harrogate Gas Company		3	3	0	—
Hartlepool Gas & Water Co. ...		1	1	0	—
Hasluck, Rev. E. (1932)	Reading	0	10	6	—
Hasluck, Rev. E. (1933)	Reading	0	10	6	—
Haworth U.D.C. Gas Dept. ...		1	1	0	—
Herbert, Mrs. N.	Alderley Edge	0	10	6	—
Herbert, Alfred Ltd.....	Coventry	1	1	0	—
Herford, Miss A. E.	Manchester	0	10	0	—
Herne Bay Gas Company		1	1	0	—
Hessle Gas Company		1	1	0	—
Hexham Gas Company		1	1	0	—
Heywood Corp. Gas Dept.		1	1	0	—
Higgs, Mrs. M.	Oldham	0	10	6	—
Hoare, A.	London	0	10	0	—
Hocken, E. B.	Nottingham	0	10	6	—
Hodgson, J. T.	Stockport	0	10	6	—

Name	Town	Subscriptions			Donations
Holmes, W. C. & Co. Ltd.	Huddersfield	5	5	0	—
Horwich U.D.C.		1	1	0	—
Huddersfield Corporation		2	2	0	—
Hull Corporation		1	1	0	—
Humphrey, Miss A. M.	Weybridge	0	12	6	—
Hunter, R. L.	London	1	1	0	—
Huntley, C. Gordon	Manchester	0	10	6	—
Hutchinson, G. H.	Newcastle-upon-Tyne	0	10	6	—
Hyde, Mrs. A.	London	1	0	0	—
Idris Ltd.	London	2	2	0	—
Illingworth, S. E.	Harrogate	1	0	0	—
Illingworth Carbonization Ltd.	Bradford	1	1	0	—
Institution of Gas Engineers ...	London	10	10	0	—
Institution of Heating and Ventilating Engineers	London	3	3	0	—
International Combustion Ltd.	London	1	1	0	—
Ipswich Gas Company		1	1	0	—
Irlam U.D.C.		1	1	0	—
Jennison, Mrs.	Eastbourne	1	1	0	—
Keeley, Robert	Prestwich	0	10	0	—
Kerfoot, T.	Ashton-under-Lyne...	2	2	0	—
Kershaw, J. B. C.	Colwyn Bay	0	10	6	—
Kildwick Parish Gas Company		1	1	0	—
Lacey, Stephen	London	2	2	0	—
Lamb, Mrs. H. C.	Manchester	1	1	0	—
Lambeth Corporation (1932) ...		1	1	0	—
Lambeth Corporation (1933) ...		1	1	0	—
Langford, A. S.	Manchester	0	10	6	—
Lea Bridge District Gas Co. ...		3	3	0	—
Lea Recorder Co.	Manchester	2	2	0	—
Lea, Miss D. C.	Oxford	1	1	0	—
Leeds Corporation.....		10	10	0	—
Leeds Corp. Gas Committee.....		5	0	0	—
Lees, Dame S.	Oldham	5	0	0	—
Lees, Miss M.	Oldham	1	1	0	—
Leicester Corporation		10	10	0	—
Leicester Corporation Gas Dept.		1	1	0	—
Lincoln Corporation		2	2	0	—
Liptak Furnace Arches Ltd. ...	London	1	1	0	—
Liverpool Gas Company		10	10	0	—
Liverpool Corporation		1	1	0	—
London, City of, Electric Lighting Company	London	2	2	0	—
London Electric Supply Assoc.		—			10 10 0
London Power Company	London	1	1	0	—
Longley, J. A.	London	1	1	0	—
Lowestoft Water & Gas Co.....		2	2	0	—
Low Temperature Carbonisation Ltd.	London	5	5	0	—
Luton Gas Company		2	2	0	—
MacWilliam, Dr. H.	Liverpool	0	10	0	—
Maidstone Gas Company		1	1	0	—
Manchester Corp. Electricity Department		2	2	0	—
Manchester Corp. Gas Dept. ...		5	5	0	—

Name	Town	Subscriptions			Donations
		26	5	0	—
Manchester Corporation					
Manchester and Salford Sanitary Association	Manchester	—			100 0 0
Mansfield Corporation		1	1	0	—
Mather, L. E.	Manchester	1	1	0	—
Melland, Ald. W.	Manchester	5	0	0	—
Melly, E. E.	London	0	10	0	—
Mid-Kent Gaslight & Coke Co....		1	1	0	—
Mirfield U.D.C.		1	1	0	—
Mirfield Gas Company		1	1	0	—
Moore, S. H.	Chester	0	10	6	—
Morgan, D. & Sons	Cardiff	1	1	0	—
National Radiator Company ...	Hull	5	5	0	—
Neville, Hon. S.	London	1	1	0	—
Newcastle-upon-Tyne and Gateshead Gas Company ...		1	1	0	—
Newcastle-upon-Tyne Corp. ...		5	5	0	—
Newton, Lord	London	1	1	0	—
Nicholson, P. B. (1932)	Wath-upon-Dearne	0	10	6	—
Nicholson, P. B. (1933)	Wath-upon-Dearne	0	10	6	—
North Middlesex Gas Co.		2	2	0	—
Nottingham Corporation		5	5	0	—
Oldham Corporation		5	5	0	—
Orr, J. H.	Cheadle	0	10	6	—
Oxford and District Gas Co. ...		1	1	0	—
Parkinson Stove Co. Ltd.	Birmingham	2	2	0	—
Payne, Mrs. A. L.	London	1	0	0	—
Pearson, Dr. S. Vere.	Mundesley	0	10	0	—
Pilcher, G. T.	London	1	1	0	—
Pontefract Bros.	Manchester	1	1	0	—
Poplar Corporation		1	1	0	—
Portsmouth Gas Company		1	1	0	—
Powell, Major-General S. H. ...	London	1	0	0	—
Power Gas Corporation	Stockton-on-Tees ...	1	1	0	—
Prentice, Dr. B.	Swinton	0	10	0	—
Preston Corporation		1	1	0	—
Preston Gas Company		1	1	0	—
Preston, J. R.	London	0	10	6	—
“Prior” Oil Burner Ltd.	London	1	1	0	—
Radcliffe U.D.C.		1	1	0	—
Radiation Ltd.	London	5	5	0	—
Redditch Gas Company		1	1	0	—
Reed, H. A.	London	0	10	6	—
Refuge Assurance Co.	Manchester	5	5	0	—
Richmond (Surrey) Corp.		1	1	0	—
Ripon Corporation		1	0	0	—
Robertson, R.	Bristol	0	10	6	—
Robinson, Mrs. S.	Hale	0	10	0	—
Romford Gas Company		2	2	0	—
Royton U.D.C.		1	1	0	—
Russell, Miss D.	London	0	10	0	—
Salford Corporation Gas Dept.		2	2	0	—
Salford Corporation		1	1	0	—
Sanger, Mrs. A. D.	London	1	0	0	—

Name	Town	Subscrip- tions	Donations
Sanitary Inspectors' Assoc. ...	London	1 1 0	—
Saunders & Taylor Ltd.	Manchester	1 1 0	—
Scarborough Gas Company ...	...	1 1 0	—
Scottish Branch N.S.A.S.	Glasgow	2 2 0	—
Seale, Mrs. I. L.	Prestatyn	0 10 6	—
Shaw, Mrs. Bernard	London	3 3 0	—
Sheffield Gas Company .....	...	1 1 0	—
Sheffield, Rotherham & District Smoke Abatement Committee		25 0 0	—
Shrewsbury Gaslight Co.		1 1 0	—
Simon, Councillor A. P.	Manchester	2 2 0	—
Simon, Sir Ernest	Manchester	2 2 0	—
Simpson & Godlee	Manchester	1 1 0	—
Sisson, L. B.	Pittsburgh	0 10 6	—
Smalley, Dr. A. A.	Bowdon	1 0 0	—
Smethwick Corporation		2 2 0	—
Smith & Wellstood Ltd.	London	1 1 0	—
Société pour les Developpement des Véhicules Electriques.....	Paris	1 1 0	—
Solihull Gas Company		1 1 0	—
Southgate & District Gas Co....		—	2 2 0
Southampton Gaslight & Coke Co.		1 1 0	—
South Metropolitan Gas Co. ...	London	26 5 0	—
South Shields Gas Company ...		1 1 0	—
St. Helens Corporation.....		1 1 0	—
Stalybridge Corporation		1 1 0	—
Stockport Corporation		2 2 0	—
Stoke-on-Trent Corporation Gas Department		1 1 0	—
Stoke-on-Trent Corporation ...		5 5 0	—
Stretford Corporation		2 2 0	—
Stretford & District Gas Board		1 1 0	—
Stourbridge Corporation Gas Department		1 1 0	—
Sunderland Corporation		5 5 0	—
Sunderland Gas Company		1 1 0	—
Sunlight League of New Zealand	Christchurch	0 10 6	—
Swales, J. C. & Co.	Manchester	2 2 0	—
Swindon United Gas Co.		1 1 0	—
Tanner, A. E.	Manchester	2 2 0	—
Thompson, A. Hugh	London	0 10 6	—
Thompson, C. H.	London	0 10 6	—
Tipton U.D.C.		1 1 0	—
Tootal, Broadhurst, Lee & Co....	Manchester	3 3 0	—
Tottenham U.D.C.		1 1 0	—
Tottenham & District Gas Co....		—	5 5 0
Treaise, W. E.	Wolverhampton	1 1 0	—
Trier, J. Newton	London	1 1 0	—
Troup, Lady	London	0 10 0	—
Turbine Furnace Co.	London	1 1 0	—
Universe Petroleum Co.	London	1 1 0	—
Des Voeux, Dr. H. A.	Lymington	2 2 0	—
Wakefield Corporation		1 1 0	—

Name	Town	Subscriptions			Donations
Wakefield Gaslight Co.....		1	1	0	—
Wallasey Corporation		5	5	0	—
Walsall Corporation		1	1	0	—
Wandsworth & District Gas Co.		5	5	0	—
Warner, A.	London	1	0	0	—
Warrington Corporation		2	2	0	—
Waterhouse, Mrs. S.	Bakewell	2	0	0	—
Watts, S. & J.	Manchester	1	1	0	—
Wesleyan & General Assurance Co.	Birmingham	1	1	0	—
Westminster Corporation.....		1	1	0	—
Whessoe Foundry & Engineering Co. Ltd.	Darlington	1	1	0	—
Whipple, Dr. F. J. W.	London	1	0	0	—
Whitehead, A.	London	1	1	0	—
Widnes Corporation		1	1	0	—
Wigglesworth, Miss E.	Rawtenstall	0	10	0	—
Willesden U.D.C.		1	1	0	—
Willey & Co.	Leicester	2	2	0	—
Winchester Water & Gas Co....		1	1	0	—
Wolverhampton Corporation Electricity Dept.		1	1	0	—
Wolverhampton Gas Co.		2	2	0	—
Woodall-Duckham Co.	London	5	5	0	—
Wrexham Corporation		1	1	0	—
Yeadon & Guiseley Gas Co.....		1	10	0	—
York Corporation		0	10	6	—
York Gas Company		10	0	0	—
Young, Mrs. T. M.	Manchester	0	10	6	—
Subscriptions and Donations under 10/-		12	5	0	0 18 0
		<hr/> £735 4 0 217 0 0 <hr/>			

THE NATIONAL SMOKE ABATEMENT SOCIETY.

Income and Expenditure Account, for the Year ended June 30th, 1933

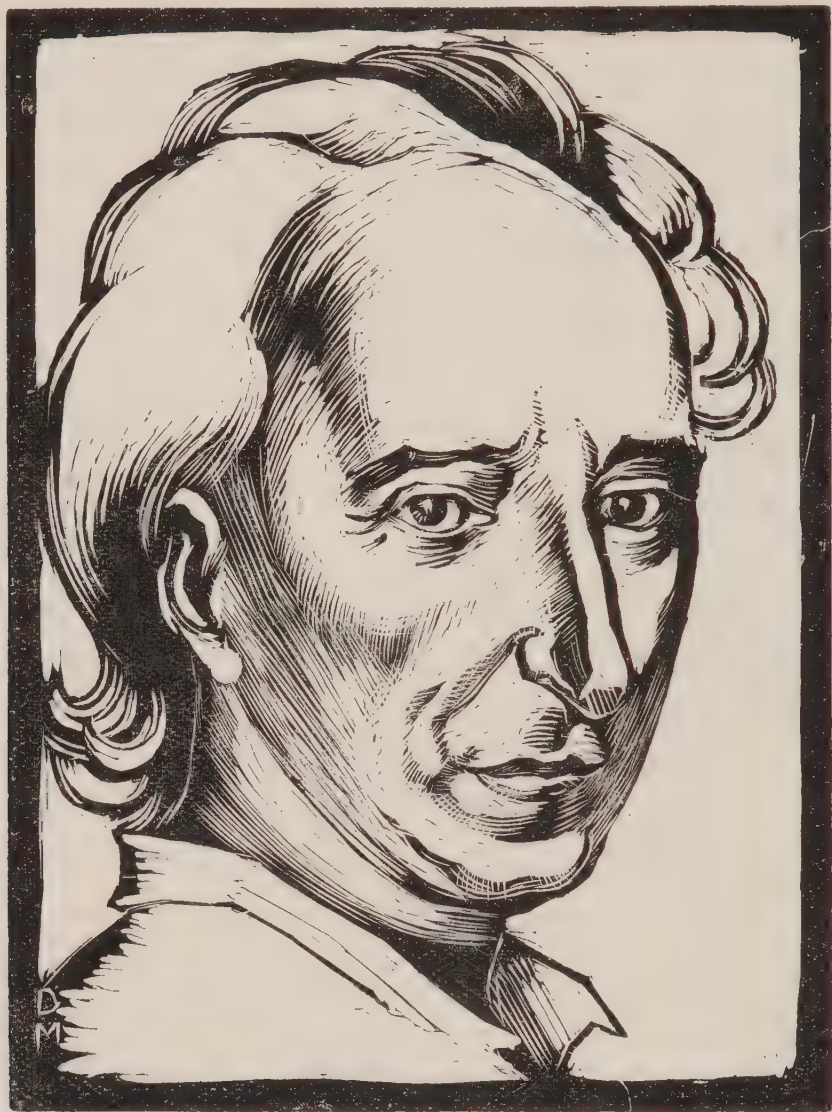
INCOME.			EXPENDITURE.		
	£	s. d.		£	s. d.
Subscriptions			Salary of Secretary and Typist	42	12 6
Donations :			Rent, Rates, Gas and Water	99	10 7
General.....	117	0 0	Printing, Stationery and Advertising	244	0 9
Manchester and Salford Sanitary Assoc.	100	0 0	Travelling Expenses	28	14 9
Sale of Literature		217 0 0	General Expenses, Postages and Telephone	125	1 10
Conference Fees		62 6 1	Furniture and Fittings	5	12 2
Dividends from Investments :		53 11 0			
Commercial Union Assurance Co. Ltd.	8	5 9			
London Midland and Scottish Rly. Co.	4	13 10	Surplus of Income over Expenditure	924	12 7
Sundry Receipts		12 19 7		158	4 4
		1 16 3			
		<u>£1082 16 11</u>			<u>£1082 16 11</u>

Balance Sheet.

CAPITAL.			ASSETS.		
	£	s. d.		£	s. d.
As at June 30th, 1932, being :			INVESTMENTS :		
Cash in Bank and in hand	377	2 8	Commercial Union Assurance Co. Ltd. :		
War Loan, £480 at 5%, realized	484	16 11	10 £2/10 Shares, fully paid, at cost... ..	205	11 0
			London Midland and Scottish Rly. Co. :		
			£313, 4% Debenture Stock, at cost... ..	279	5 11
			Manchester and Salford Savings Bank :		
Add Surplus of Income over Expenditure ..	861	19 7	Deposit.....	250	0 0
		1020 3 11			
			Cash in Bank and in hand, June 30th, 1933	734	16 11
				285	7 0
		<u>£1020 3 11</u>			<u>£1020 3 11</u>

"Against the hellish and dismal cloud of sea-coal which broods over cities and which is a nuisance of all time, this tract of Mr. John Evelyn's is the most elegant, heartfelt, and moving of pleas."

—From Miss Rose Macaulay's Introduction.



JOHN EVELYN.

The above is a reproduction of the wood-engraved portrait of John Evelyn, as it appears in the Society's edition of his

"FUMIFUGIUM"

If you have not yet purchased a copy you are missing the most fascinating and eloquent indictment of the smoke nuisance ever written.

Paper covers, 6d. Cloth bound, 1/6d.

FROM THE SOCIETY'S OFFICES, 23, KING STREET, MANCHESTER, 2.

MEMBERSHIP FORMS.

INDIVIDUAL.

*To the General Secretary, National Smoke Abatement Society,
23, King Street, Manchester.*

Kindly admit the undersigned as a Member/an Associate of
the Society. A first Annual Subscription is enclosed, to date
from..... 193.....

Signed

Address in full.....

.....

.....

Minimum Subscription for members
(including Journal) 10/6.
Associate Subscription 5/-.
Life Membership Subscription £25.

COMMERCIAL FIRMS AND AFFILIATED MEMBERS.

(See Constitution, Sections 3 and 4).

*To the General Secretary, National Smoke Abatement Society,
23, King Street, Manchester.*

Kindly admit the undersigned as a member of the Society.
A first Annual Subscription of £ : : is enclosed,
to date from 193.....

Signed

On behalf of

Address

Representative(s) appointed

.....

Address Communications to { Firm
Representative.

Minimum Subscription, One Guinea.

DONATION FORM.

*To the General Secretary, National Smoke Abatement Society,
23, King Street, Manchester.*

I enclose £..... as a donation to the Society, and
would be pleased to receive notices, literature, etc., from time
to time. (Delete latter clause if desired).

Signed

Address

.....
.....

To be forwarded to the Society.

BANK ORDER FORM.

To the Manager,

The Bank.

Please pay the sum of £ : : immediately
and on the same date in each succeeding year until further notice,
to the credit of the NATIONAL SMOKE ABATEMENT SOCIETY, with
the Manchester and County Bank Ltd., 55, King Street, Manchester.

Signed

Address

.....
.....

Date 193

FORM OF BEQUEST.

“I give free of duty to the National Smoke Abatement Society
of 23, King Street, Manchester, the sum of £.....to be
applied to the general purposes of the said Society, and I declare
that the receipt of the Treasurer for the time being shall be a
sufficient discharge to my Executors for the same.”

LET

SMOKE

DISAPPEAR

is, as we are unfortunately not magicians, only a pious and entirely useless exhortation. Smoke will not disappear unless we continue our work of creating that public opinion and demand out of which alone can come the desired results. To do this work of education and enlightenment effectively requires money; to do it as intensely as we could, and to make use of the many opportunities we are now forced to forego, requires an income much larger than we have at present. Thus, as we are unfortunately not magicians, we have to stress once again the need for further

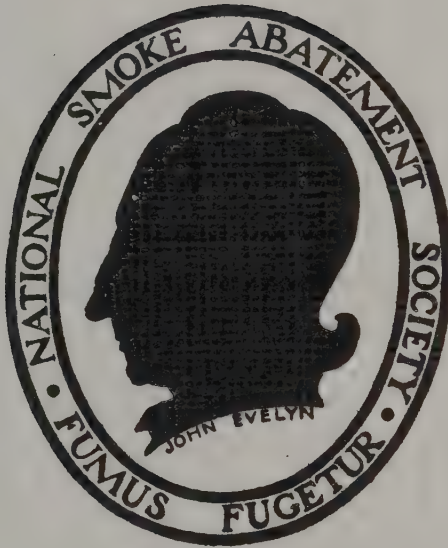
LEGACIES

SUBSCRIPTIONS and

DONATIONS

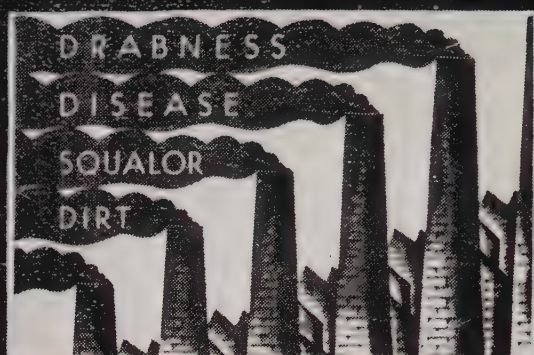
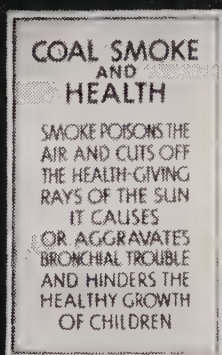
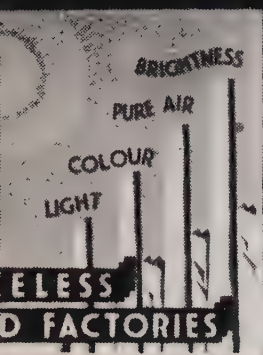
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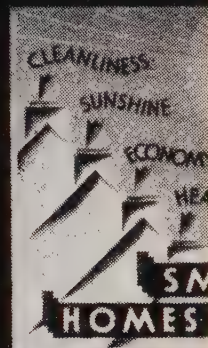
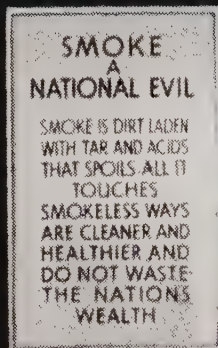
The National Smoke Abatement Society



F I F T H
A N N U A L
R E P O R T
1 9 3 4 - 5

— STOP THAT SMOKE!





The Society's poster set to be used for display on the "E.M.B." frames in December, 1934, as part of the health propaganda scheme arranged by the national health associations and local authorities through the Central Council for Health Education.

Price per set, to authorities participating in the scheme, 7s. 6d. To others, 10s. Single posters, 2s. 6d. and 1s. 6d. each.

The Society's Stand at the Manchester
"Domesticities" Exhibition.

FIFTH ANNUAL REPORT

of the

National Smoke Abatement Society

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1 9 3 4

36 KING STREET
MANCHESTER, 2

National Smoke Abatement Society

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ELECTRICAL INDUSTRY.—Mr. A. P. M. Fleming, and Lt.-Col. W. A. Vignoles.

HON. AMERICAN CORRESPONDENT.—Mr. H. B. Meller, Pittsburgh.

Information Concerning the Society

The National Smoke Abatement Society was formed in 1929 by the amalgamation of the Coal Smoke Abatement Society (1899) and the Smoke Abatement League of Great Britain (1909). It is an organization dependent entirely upon voluntary support, and its objects and the conditions of membership will be found in the constitution, on another page.

Offices.—Central (General Secretary's) Offices : 36, King Street, Manchester, 2. Tel. : BLAckfriars 0896.

London Office : 71, Eccleston Square, S.W.1. Tel. Victoria 9274

Scottish Branch : City Chambers, Glasgow.

Lectures.—The Society will endeavour to supply lecturers on smoke abatement in any part of the country. As a rule, the only charge is for the travelling expenses of the lecturer. The services of the Secretary of the Society are generally available for lectures.

Exhibits.—The Society is prepared to loan smoke abatement exhibits, suitable for use at health and other exhibitions, free of charge ; or to take and equip stands at such exhibitions. A list of exhibits available will be sent on request.

Lantern Slides.—The Society possesses a large number of lantern slides dealing with various aspects of smoke abatement. These will be loaned for the use of lecturers at a charge of one penny per slide, plus postages. A catalogue of the slides will be sent on request.

Posters.—Slogan posters, size 30 in. by 20 in., four kinds, printed black and green, can be purchased at 4d. each.

Shade Cards for Smoke Inspection.—Tinted shade cards, showing different densities of smoke, of which the denser tints have been adopted as nuisances by magistrates hearing coal smoke complaints, are available at a price of 6d. each.

Information and Advice.—The Society is glad, at any time, to be of assistance to any person requiring information on smoke abatement and related matters. Inquiries should be addressed to the General Secretary, at 36, King Street, Manchester 2.

List of Publications

(All prices include postage. Reduced Prices for quantities).

Smoke Abatement Handbook. A *vade-mecum* on all aspects of the smoke nuisance and its abatement. Contains authoritative articles, numerous statistics, and a variety of interesting facts. Indispensable to all who are concerned with the subject. 8vo. pp. 48. 6d., 5/- per dozen copies.

The Journal of the National Smoke Abatement Society. Published quarterly. Is not a record of proceedings but a magazine—the only one in the world—devoted to the problems of atmospheric pollution. Contains authoritative articles, notes on technical methods, news of activities of every kind, and in general keeps the reader up-to-date in every aspect of the subject. Per annum 2/6. Gratis to members.

Fumifugium; or the Smoake of London Dissipated, by John Evelyn. This rare and fascinating book, first published in 1661 by command of Charles II., has been republished by the Society with an introduction by Miss Rose Macaulay. It is illustrated with original wood engravings and a portrait of Evelyn. Paper covers 6d., cloth bound 1/6.

Home Fires Without Smoke. Edited by Cyril Elliott and Marion Fitzgerald. 8vo. pp. 59. Cloth-bound remainders 6d.

Smoke and Fumes Nuisances from Road Vehicles. Technical and scientific aspects by Dr. J. S. Owens, A.M.Inst.C.E., M.I.Mech.E.; and the legal position by R. P. Mahaffy, M.A. 8vo. pp. 16. 3d.

Smoke and Health. By Dr. J. S. Taylor, M.D., D.P.H., Assistant Medical Officer of Health, Manchester. 8vo. pp. 12. 2d.

Smoke Abatement in Salt Lake City, Utah. A full and illuminating report of the intensive and successful campaign in Salt Lake City. 8vo. pp. 43. 3d.

N.S.A.S. Annual Reports. Gratis, by post 1d.

Conference Reports and Proceedings:

Proceedings of the Newcastle Conference, 1932. Containing the Presidential address, papers by R. A. Mott, on "The Domestic Smoke Problem: the Possibilities of Coke Oven Fuel"; Alderman David Adams, on "The Psychological Effects of Smoke"; A. E. Crossley, on "The Human Element: A Factor in Smoke Abatement." With discussion. 8vo. pp. 63. 1/-.

Proceedings of the Sheffield Conference, 1933. Containing the Presidential address, resolutions adopted, papers by Councillor W. Asbury, on "The Five Years Clause and other Matters arising from the Public Health (Smoke Abatement) Act, 1926"; Mrs. Millicent Jast, on "How the Citizen Takes the Air—the Personal Significance of the Coal Smoke Problem"; Messrs. R. H. Clayton and Charles Gandy, on "The Combating of Domestic Smoke in Industrial Areas." 8vo. pp. 60. 1/-.

Proceedings of the Glasgow Conference, 1934. Containing the Presidential Address, papers by Dr. J. S. Owens, on "The Measurement of Atmospheric Pollution"; Mr. Oliver Cochran, on "The Effects of Smoke upon Visibility and Aviation"; Mr. W. D. Besant, on "The Effect of a Smoke-laden Atmosphere on Horticulture"; Bailie W. B. Smith, on "Nature is Beautiful, etc."; Dr. J. Johnstone Jervis, on "Slum Clearance and the Smoke Problem." Also resolutions on grit emission and housing, and discussions in full. 8vo. pp. 72. Price 1/-.

Separate Conference Papers:

"The Progress of the Electrical Grid." by Robert Blackmore, M.I.E.E. 3d.

"The Production and Use of the New Smokeless Fuel 'Dryco' in Liverpool," by Ralph E. Gibson, M.Inst.C.E., M.Inst.GasE. 3d.

"Atmospheric Pollution as Affecting Visibility and Visibility as Affecting Aviation," by Messrs. M. G. Bennett, M.Sc., and F. Entwistle, B.Sc., of the Meteorological Office. 3d.

"The Complete Gasification of Coal," by T. R. Wollaston, M.I.Mech.E. 3d.

"The Fuel of the Future." by Sir Francis Goodenough. 3d.

"Powdered Fuel and the Smoke Problem," by Dr. J. T. Dunn, D.Sc., F.I.C. 3d.

"How Electricity Can Help in Abating Smoke," by Julius Frith, M.Sc., M.I.E.E. 3d.

"Power from Sources other than Coal," by Prof. Miles Walker, M.A., D.Sc. 3d.

"Furnace and Tank Boiler Design," by W. H. Casmey. 3d.

"The Smoke Inspector and the Cost of Production," by H. G. Clinch, M.R.San.I., M.I.H. 3d.

Published by other Organizations:

"Smoke Abatement and Fuel Economy in Steam Boiler Practice." (Manchester and District Regional Smoke Abatement Committee). pp. 11. 1d., post 2d.

"The Open Fire." (Manchester Air Pollution Board). 1d., post 2d.

"The Black Smoke Tax." Report of an extensive investigation into the cost of smoke in Manchester. (Manchester Air Pollution Board). 1d., post 2d.

Latest Publications

A new work of reference indispensable to all concerned with smoke abatement.

A treatise on
THE LAW RELATING TO SMOKE AND NOXIOUS FUMES
by the late

Randolph A. Glen, M.A., LL.B., Cantab,

Recorder of Penzance

Of the Middle Temple and Western Circuit

Standing Counsel to the National Smoke Abatement Society.

Editor of "Glen's Public Health" (14th Edition), etc.

With a Foreword by Sir Lawrence Chubb.

Published by the Society.

Price 1/- Post Free.

An important review of the present position of solid smokeless fuels.

Report

of the

SYMPOSIUM ON SMOKELESS OPEN-GRATE FUELS.

Papers and Discussion at the conference arranged by the Society in London on June 8th, 1934. Papers by E. K. Regan, E. W. L. Nicol, Col. W. A. Bristow, H. Cerckel, Mrs. G. H. Miles, Dr. G. E. Foxwell, John Roberts, and Dr. E. W. Smith.

Price 1/- Post Free.

At Last!

THE SMOKELESS HOME.

A popular 12-page illustrated pamphlet, with cover in colours, describing the ways and means for making the home smokeless. To be sold in quantities for general distribution. Single copies gratis. £5 per 1,000.

CONSTITUTION OF THE SOCIETY

1. **NAME.**—The Society shall be called the NATIONAL SMOKE ABATEMENT SOCIETY.

2. **OBJECTS.**—The Society shall be concerned with the prevention of air pollution generally, and in particular, that arising from coal smoke.

The objects of the Society shall be :—

- (a) To create an informed public opinion on the evils of air pollution.
- (b) To inquire into, and if thought advisable, assist investigations directed towards the abolition of smoke, whether industrial or domestic.
- (c) To take steps to popularize the use of smokeless methods of heat and power production.
- (d) To promote and support legislation for preventing the pollution of the atmosphere.

3. **MEMBERSHIP.**—The Society shall consist of :—

- (a) Life Members.
- (b) Members.
- (c) Associates.
- (d) Affiliated Members.

Life Members.—A donation of not less than twenty-five guineas paid in one amount by any individual, shall constitute the donor a member for life.

Members.—An Annual Subscription of not less than half a guinea in the case of an individual, or one guinea in the case of a commercial firm, shall constitute the subscriber a member. A commercial firm registered as a member shall be entitled to nominate a representative to exercise the privileges of membership as regards attendance at meetings, voting, etc.

Associates.—An Annual Subscription of not less than five shillings shall constitute that subscriber an Associate.

Affiliated Members.—The payment of not less than one guinea by any Local Authority, Society or Institution, shall constitute the subscribing body an Affiliated Member. The affiliated Member shall be entitled to appoint two representatives to the Council of the Society, who shall receive the privileges of full membership of the Society.

4. PRIVILEGES OF MEMBERSHIP.—The privileges of membership shall include :—

- (a) Advice and assistance in questions relating to smoke abatement and fuel economy as far as the circumstances of the Society will permit.
- (b) Free admission to lectures arranged by the Society.
- (c) The right to receive free of cost, the general publications of the Society as they appear, including the Journal of the Society. Associates shall not, however, receive the Journal and such other literature as may be decided upon from time to time.

5. THE COUNCIL.—The Council of the Society shall consist of the Officers, the members of the Executive Committee, two representatives from each Affiliated Member, together with not more than thirty members to be elected annually at the General Meeting.

The business of the Council shall be to direct the policy of the Society in general and to receive any periodical reports from the Executive or other committee.

The Council shall meet at least twice a year, of which at least one meeting shall take place in London.

6. THE EXECUTIVE COMMITTEE.—The Executive Committee shall consist of the Officers and not less than twelve members or representatives of Affiliated members, who shall be elected annually at the General Meeting of the Society. The Executive Committee shall have power to appoint sub-committees, and to co-opt additional members. Five shall form a quorum.

The Committee shall meet as required, and the place of meeting shall be at the central offices of the Society, or other place at the discretion of the Committee.

The business of the Committee shall be to manage the affairs of the Society.

7. OFFICERS.—The Officers of the Society shall be President, Vice-President and Honorary Treasurer, to be elected annually. The Chairman of the Committee and of the Council, shall also be Officers, but shall be elected by their respective Committees.

8.—GENERAL MEETING.—The General Meeting of the Society shall be held annually at which shall be presented the Annual Report and the Audited Financial Statement, and at which the Officers, the Council and the Executive Committee for the following year shall be elected. Other general meetings shall be held on the requisition of the Council or Executive Committee, or of 20 members of the Society. One month's notice shall be given of all General Meetings.

9. **ALTERATION TO CONSTITUTION.**—No change shall be made in the constitution of the Society, except by a two-thirds majority of the members present and voting at the Annual Meeting or at a Meeting called specially for the purpose. A notice in writing of any resolution to be submitted for this purpose must be sent to all members of the Society at least a fortnight before the Annual or Special General Meeting.

10. **ACCOUNTS.**—Accounts shall be kept of all moneys received and expended by the Society, and once at least every year the accounts of the Society shall be examined and the correctness thereof certified by a qualified auditor.

11. **BRANCHES.**—Branches of the Society shall be constituted, as far as possible, in the town or districts of the United Kingdom, to deal with local smoke abatement and air pollution problems. Branches shall settle their own constitution and terms of membership, but shall pay an affiliation fee of at least sixpence for every individual member and of two shillings and sixpence for every firm affiliated to the National Society, except in the case of members who are also members of the National Society. Members of the Branches who are not also members of the National Society shall be entitled to attend the General and other meetings of the Society, but shall not be entitled to vote thereat. The Branch shall, however, appoint two delegates to the Council of the National Society and to the Annual General Meeting, who shall have full voting powers.

12. **JOURNAL AND LITERATURE.**—A copy of each issue of the Journal of the Society, together with all other current general literature shall be sent free to each member and delegate from each Affiliated member ; to the Town Clerk of each affiliated Local Authority, and to the Secretary of each affiliated Society or Institution.

13. **INTERPRETATION OF CONSTITUTION.**—The interpretation of these rules together with any question on which the rules are silent shall be decided by the Executive Committee until the next Annual General Meeting.

FIFTH ANNUAL REPORT

for the Year ended June 30th, 1934.

General Review.—During the year under review the increasing interest in the smoke problem has been maintained, and the subject has been widely discussed in the press and by public associations and local authorities. The number of complaints made in local newspapers and in the councils of local authorities appears to be much greater than it was a few years ago, and this may be taken, not as a sign of increasing nuisances, but rather as a welcome indication of a growing public consciousness of smoke and the deleterious effects of a polluted atmosphere. Further, as industry recovers from the economic depression the toleration of nuisances that has arisen from a desire to refrain from harassing it will tend to disappear.

One of the most valuable object lessons possible was afforded by the abnormally prolonged spell of dry, still weather in the late winter and early spring. Dust and dirt accumulated in a way that rarely happens; the stagnant, unwashed air of our towns became visibly obnoxious, evergreens and the early spring growth of plants were blackened and burned, and the country began to realize how much it was dependant upon the scavenging action of the wind and rain, and how insanitary our habits appeared when these natural forces failed. Added to this were frequent fogs and the overhead "black-outs," as the newspapers call them, which are entirely due to coal smoke. The position was summed up and the obvious remedies outlined in a valuable letter to *The Times*, which appeared on March 2nd, from Dr. Des Voeux, the President of the Society.

Numerous conferences, lectures and instructional classes have been held in various parts of the country, mainly by the Regional Committees, the Scottish Branch, and the Society itself. The two new Regional Committees are now established and actively engaged, thus making six such bodies, including the one statutory committee.

Sheffield Conference.

By invitation of the Sheffield, Rotherham, and District Smoke Abatement Committee, the Fifth Annual Conference of the Society was held in Sheffield on September 22nd, 23rd, and 24th, 1933. The meetings were attended by 117 members, delegates, and visitors. The papers read, which have since been published in the *Proceedings*, were as follows: "The Five Years Clause and other Matters arising from the Public Health (Smoke Abatement) Act, 1926," by Councillor W. Asbury. "How the Citizen Takes the Air: the Personal Significance of the Smoke Problem," by Mrs. Millicent Jast. "The

Combating of Domestic Smoke in Industrial Areas," by Messrs. R. H. Clayton and Charles Gandy. The customary Saturday visit took the form of an inspection of the Smithy Wood Gas and Coke Plant, by the invitation of Messrs. Thorncliffe Coal Distillation, Ltd. Resolutions passed at the Conference are mentioned below.

Housing Resolution and Memorandum.

The following Resolution on Housing and Smoke Abatement was unanimously adopted at the Sheffield Conference.

"That this Conference of the National Smoke Abatement Society welcomes the extensive schemes that are to be undertaken for slum clearance and re-housing, and as smoke, with the dirt, gloom, and ill-health that it causes, is one of the most important factors in producing slum conditions, urges all authorities concerned with housing to take steps to ensure the greatest practicable degree of smokelessness in all new housing estates, whether municipal or privately built, and in rebuilt areas.

In particular it urges :

- (a) That appliances for the use of gas and electricity should be installed as extensively as possible, and their use encouraged.
- (b) That where ranges for cooking and heating and open fires for the use of solid fuel are installed, they should be of a type capable of satisfactorily burning smokeless solid fuels, for the storing of which adequate accommodation should be provided.

The Conference urges the Minister of Health to investigate the position with respect to (b) above, and to make recommendations to the authorities concerned according to his findings.

Further, with a view to ensuring a parallel reduction of smoke emission from buildings other than private dwelling houses, the Conference urges the Minister of Health to take steps which will make possible the framing of bye-laws under Section 5 of the Public Health (Smoke Abatement) Act, 1926."

The resolution was sent to the Minister of Health and to all local authorities, excepting Rural Districts, in the country. In the latter case it was incorporated in a memorandum that explained in greater detail the reasons that make smoke prevention essential to satisfactory housing and rehousing schemes.

Road Vehicles.

The following Resolution, proposed by the Scottish Branch, was also adopted at the Conference and was forwarded to the Minister of Transport.

“That the Minister of Transport be respectfully requested to take the necessary steps to amend Regulation No. 18 of the Statutory Rules and Orders, made under the powers conferred upon him by the Road Traffic Act, 1930, by inserting after the word ‘fuel’ occurring in the said Regulation, the words ‘shall use only smokeless or non-bituminous fuel and’; Provided that for the purpose of this Regulation the words ‘smokeless or non-bituminous fuel’ shall be held to mean ‘fuel containing not more than fourteen per cent. of volatile matter.’”

The Regulation referred to, if amended in the way proposed, would read :—

“Every motor vehicle using solid fuel shall use only smokeless or non-bituminous fuel and shall be fitted with an efficient appliance for the purpose of preventing the emission of sparks or grit, and also with a tray or shield to prevent the ashes and cinders from falling on to the road.”

Following correspondence on the question a deputation from the Society was received by Lt.-Col. C. M. Headlam, Parliamentary Secretary to the Minister, and the case put at greater length. No action on the lines suggested has, however, been taken.

1934 Conference.

An invitation was received from the Corporation of Glasgow to hold the 1934 Conference in that City. The invitation was gratefully accepted by the Executive Committee, and the Conference has been arranged and will be held in conjunction with the Scottish Branch of the Society.

Empire Marketing Board Poster Frames.

In conjunction with eleven other national health associations the Society is participating in the scheme of the Central Council for Health Education to utilize the former Empire Marketing Board poster frames in areas where the frames have been taken over by the local authorities. Posters are now in the course of preparation and will be displayed in November or December.

Symposium on Open-Grate Fuels.

The meeting of the Society that is held each summer in London this year took the form of a symposium of eight papers on the subject of smokeless fuels for use in the open grate. The meeting was well attended and was held in the Caxton Hall, Westminster. The subjects and speakers were as follows :—

“Natural Smokeless Fuels,” by E. K. Regan.

“Gas Coke,” by E. W. L. Nicol.

“Low Temperature Carbonization Fuel,” by Col. W. A. Bristow.

"Coke Oven Fuel," by H. Cerckel.

"From the Housewife's Point of View," by Mrs. G. H. Miles.

"Development and Marketing," by Dr. G. E. Foxwell.

"The Properties Required in an Open-Grate Fuel," by John Roberts.

"From the Viewpoint of National Economy," and "Conclusion," by Dr. E. W. Smith.

A full report of the Conference, giving the papers and discussions in full has been published and copies have been sent to all members.

Publications.

The *Journal* continues to be published in the same manner as before, and in addition to this and the Annual Report there have been published, during the year, the *Proceedings of the Sheffield Conference*, the *Report of the Symposium on Smokeless Open-Grate Fuels*, the *Memorandum on Housing*, the paper presented by the late Sir Frank Baines in July, 1933, a separate reprint of the paper read by Mrs. Millicent Jast at the Sheffield Conference, and a small leaflet, *What Comes First in the Home?*

The revenue from the sale of literature is not considerable owing to the low price of the separate publications, and it is only rarely that a profit is made on any publication. This, however, is a secondary consideration, for it is by the distribution of literature that the case for smoke prevention can be most widely disseminated. There is now a steady demand for publications, often from new and unknown correspondents, and quantities are sometimes purchased by local authorities and Regional committees for distribution among their members.

Lectures and Exhibitions.

A number of meetings have been addressed during the year on behalf of the Society, including addresses to the Rotary Clubs of Halifax and Royton, and the Electrical Association for Women in Liverpool, Halifax, and Stoke-on-Trent. The Society has had stands at Health Exhibitions at Cardiff and Nuneaton, at the "Domesticities" Exhibition in Manchester, and has loaned material for use at exhibitions at Wallington and Wrexham.

Offices.

For some time inconvenience has been felt owing to the two rooms of the Manchester office being on different floors and to an exhibits and publications store-room being a considerable distance away. The offices have accordingly now been transferred, at no greater expense, to No. 36 King Street, where three rooms have been taken, being used as private and general offices, and a store

or workroom. Members and representatives are cordially invited to call at the offices when in Manchester.

Financial Position.

A comparison of the statement of accounts with that of the previous year will show that the financial position is substantially the same. Included in last year's income was a special donation of £100 which does not, of course, occur again. A life membership subscription in the current accounts will also not be repeated. A stationary income, although greatly improved over those of a few years ago, is not entirely satisfactory, for it is only one stage removed from a decline, and it must be borne in mind that an income of at least twice the present figure could be most profitably utilized even on the basis of our existing organization. A greatly increased number of free and more attractive publications, a more striking collection of exhibits and participation in a greater number of exhibitions, the preparation and showing of films, pictorial posters, the use of show windows in different towns for monthly displays—all these and many other activities are possible given only the necessary financial support. With the ending of "crisis" economy it is hoped that it will be possible, during the coming year, to make a fresh appeal for subscriptions and donations. Present members are gratefully thanked for their continued support, which it is hoped will be found possible to be continued.

Obituary.

It is with deep regret we record the deaths, during the year, of Sir Frank Baines, Mr. Randolph A. Glen, and Captain J. Bell-White. Sir Frank Baines was elected Vice-President of the Society only at the Sheffield Conference in September last, following the paper he read at the meeting in July. Mr. Randolph Glen and Captain J. Bell-White were members of the Council and had been members of the Coal Smoke Abatement Society for many years. Mr. Glen had occupied the new position of Standing Counsel to the Society for a few months only before his death, and his last public work, which he completed on his sick bed, was the writing, for the Society, of a new Treatise on the English Law Relating to the Emission of Smoke and Noxious Fumes. It had not been possible to obtain the manuscript for some time, but it has now been received and will shortly be published.

WILL MELLAND, *Chairman.*

ARNOLD MARSH, *General Secretary.*

SUBSCRIPTIONS AND DONATIONS

for the year ended June 30th, 1934

Name	Town	Subscrip- tions			Dona- tions		
		£	s.	d.	£	s.	d.
Acworth, E. A.	London	1	1	0	—		
Acworth, A. W.	London		10	6	—		
Affleck and Brown	Manchester	2	2	0	—		
Allen, Rev. R. E. T.	Withington		10	0	—		
Altrincham Gas Company...		1	1	0	—		
Anonymous					20	0	0
Arning, A. W.	Fallowfield	1	0	0	—		
Ashton, Miss M.	Didsbury	1	1	0	—		
Ashton Brothers	Manchester	2	2	0	—		
Ashton, Hoare and Co.	Manchester	1	1	0	—		
Atkinson, Mrs.	London	25	0	0	—		
Banbury Gas Company		1	1	0	—		
Barber, Stanley S. (1933) ...	London		10	6	—		
Barber, Stanley S. (1934) ...	London		10	6	—		
Barbour, Robert & Bros. ...	Manchester	2	2	0	—		
Barlow, Miss A. E. F. (1933)	Bolton		10	0	—		
Barlow, Miss A. E. F. ... (1934)	Bolton		10	6	—		
Barlow and Jones, Ltd.	Manchester	2	2	0	—		
Barlow, Sir T.	London		10	6	—		
Barnoldswick U.D.C.		1	1	0	—		
Barr Flue Cleaners, Ltd. ...	Glasgow	1	1	0	—		
Bath Gas Company		1	1	0	—		
Batta, Prof. G.	Belgium		10	6	—		
Baxendale and Co.	Manchester	2	2	0	—		
Beard, E.	Whalley Range	1	1	0	—		
Beard, J. R.	Purley	1	1	0	—		
Beautiful Oldham Society...		1	1	0	—		
Beckwith, J.	London	1	1	0	—		
Bennett, Dr. J.	Warrington		10	6	—		
Bibby, J. and Sons	Liverpool	5	0	0	—		
Bibby, Mr. & Mrs. H. P. ...	Birkenhead	2	0	0	—		
Bingley Corporation		1	1	0	—		
Birkenhead Corporation		2	2	0	—		
Birmingham Corp. Gas Dept.		5	5	0	—		
Birmingham Corp. (1933)...		5	5	0	—		
Birmingham Corp. (1934)...		5	5	0	—		
Bognor Gas & Electricity Company		1	1	0	—		
Bonham-Carter, Sir E.	London	1	0	0	—		
Bootle Corporation		5	5	0	—		
Bournemouth Gas & Water Company		2	2	0	—		
Bracey, Dr. H.	Birmingham		10	6	—		

Name	Town	Subscriptions			Donations		
Bradford Corporation		1	1	0	—		
Bray, Geo. & Co.	Leeds	1	1	0	—		
Brighouse Corporation		2	2	0	—		
Brighton, Hove & Worthing Gas Company		2	2	0	—		
Briggs, C. H.	London		10	6	—		
Bristol Corporation		5	5	0	—		
Bristol Gas Company		5	5	0	—		
British Commercial Gas Association	London	50	0	0	—		
British Electrical Develop- ment Association	London	—			50	0	0
British Elec. and Allied Manufacturers' Assoc.	London	—			10	10	0
British Gas Light Co.	London	2	2	0	—		
British Medical Association	London	1	1	0	—		
Buchanan, Dr. J. D. (1934)	Lancaster		10	6	—		
Buchanan, Dr. J. D. (1935)	Lancaster		10		—		
Burnley Corporation		2	2	0	—		
Burnley Corp. Gas Dept. ...		1	1	0	—		
Bury Corporation		2	2	0	—		
Buxton Corporation		1	1	0	—		
Cable Makers' Association	London	—			10	0	0
Cadbury Brothers	Bournville	2	2	0	—		
Calverley & Horsforth Dist. Gas Company		1	0	0	—		
Cambridge University and Town Gas Light Co.		1	1	0	—		
Cardiff Corporation		1	1	0	—		
Cardiff Gas Company		1	1	0	—		
Carr, J. D.	Manchester	1	0	0	—		
Cawthorn, Miss M.	Pirbright		10	6	—		
Cheetham, H.	Manchester		10	6	—		
Cheltenham Gas Company...		1	1	0	—		
Chester United Gas Co.....		2	2	0	—		
Clay, Dr. E.	Stockport		10	0	—		
Clayton, R. H.	Manchester	2	2	0	—		
Clegg, E.	Bradford		10	6	—		
Clevedon Gas Company ...		1	1	0	—		
Clinch, H. G.	Stratford		10	6	—		
Cohen, Prof. J. B.	Coniston		10	6	—		
Coke Oven Managers' Association		1	1	0	—		
Commercial Gas Company..	London	5	5	0	—		
Cooper, Miss I.	Bramhall		10	6	—		
Co-op. Holidays' Assoc. ...	Fallowfield	—			3	3	0
Croydon Gas Company		5	5	0	—		
D. & I. Smokeless Fuels Ltd.	London	1	1	0	—		
Dalbiac, R. H.	London		10	6	—		
Daniels, S. R.	Oxford		10	6	—		
Darlington Corporation.....		1	1	0	—		
Dobson, Dr. J. M. B.	Oxford	1	1	0	—		
Doncaster Corporation		1	1	0	—		

Name	Town	Subscrip- tions			Dona- tions		
Dudley, Brierley Hill and District Gas Co.		1	1	0	—		
Duguid, Mr. and Mrs. S. N. Lymn		1	1	0	—		
Ealing Corporation		1	1	0	—		
East Cowes Gas Company		1	1	0	—		
Edmonton U.D.C.		1	1	0	—		
Elland Gas Co. (1933)			—		1	1	0
Elland Gas Co. (1934)			—		1	1	0
Elsworthy, J. G.	London	1	1	0	—		
Evans, Mrs. R.	Dorking	1	0	0	—		
Exeter Gaslight and Coke Company		2	2	0	—		
Failsworth U.D.C.		1	1	0	—		
Falk Stadelmann & Co.	London	1	1	0	—		
Farnsworth U.D.C.		3	3	0	—		
Finsbury Corporation		1	1	0	—		
Fitton, F. A.	Manchester	10	6		—		
Fitzgerald, Miss M.	Bolton	10	6		—		
Fletcher, G. H.	Sheffield		—		10	6	
Flugel, Mrs. M.	London	10	0		—		
Forster, A. Lindsay	Glasgow	1	1	0	—		
Foster, Miss K.	Harrogate	10	6		—		
Fox, Miss	London	10	6		—		
Fox, F.	Wimbledon	10	0		—		
Fry, Miss A. Ruth	Thorpeness	1	0	0	—		
Fry, Miss A.	Bridgwater	10	6		—		
Gaddum, H. E. (1933)	Bowdon	10	0		—		
Gaddum, H. E. (1934)	Bowdon	10	0		—		
Gandy, Charles	Manchester	4	4	0	—		
Gandy, Mrs. and Mrs. H. ...	Corbridge	1	1	0	—		
Gallenkamp, A. and Co. ...	London	1	1	0	—		
Ganter, D.	Old Trafford	10	6		—		
Gas Chambers and Coke Ovens Ltd.	London	1	1	0	—		
Gas Light and Coke Co. ...	London	52	10	0	—		
General Electric Company	London	5	5	0	—		
Gerrard, A. D.	Manchester	10	0		—		
Gibson, Ralph E.	Liverpool	10	6		—		
Glasgow Corp. Gas Deut....		2	2	0	—		
Gloucester Gas Light Co....		1	1	0	—		
Glover and Main, Ltd.	London		—		5	5	0
Godalming Gas & Coke Co.		1	1	0	—		
Godbert, C. W.	Clayton Bridge	1	1	0	—		
Goodenough, Sir F.	London	2	2	0	—		
Great Grimsby Gas Co.		1	1	0	—		
Great Yarmouth Gas Co. ...		2	2	0	—		
Guildford Gaslight and Coke Company		2	2	0	—		
Halifax Corporation		2	2	0	—		
Hampstead Health Protection Society	Hampstead	1	1	0	—		
Hancock, A.	Manchester	10	6		—		
Harrogate Corporation		2	2	0	—		

Name	Town	Subscriptions			Donations
Hartlepool Gas and Water Company		1	1	0	—
Haworth U.D.C. Gas Dept.		1	1	0	—
Herberts, A. Ltd.	Coventry	1	1	0	—
Herbert, Mrs. N.	Buxton	10	6		—
Herford, Miss A. C.	Withington	10	6		—
Herne Bay Gas Company...		1	1	0	—
Hessle Gas Company		1	1	0	—
Hexham Gas Company		1	1	0	—
Higgs, Mrs. M.	Oldham	10	6		—
Hoare, A.	London	10	0		—
Hocken, E. B.	Nottingham	10	6		—
Holborn Corporation		1	1	0	—
Holmes, W. C. & Co. Ltd.	Huddersfield	5	5	0	—
Hope, Councillor S., M.P....	Handforth	2	2	0	—
Horwich U.D.C.		1	1	0	—
Huddersfield Corp.		2	2	0	—
Hull Corporation		1	1	0	—
Humphrey, Miss A. M.	Weybridge	12	6		—
Huntley, C. Gordon	Manchester	10	6		—
Hutchinson, G. H.	Benwell	10	6		—
Hyde, Mrs. A.	London	1	0	0	—
Ideal Boilers & Radiators, Ltd.	Hull	5	5	0	—
Illingworth Carbonization Ltd.	Bradford	1	1	0	—
Illingworth, S. E.	Weeton	1	0	0	—
Ingham, W.	Manchester	10	0		—
Instn. of Gas Engineers ...	London	10	10	0	—
Institution of Heating and Ventilating Engineers ...	London	3	3	0	—
International Combustion Ltd.	London	1	1	0	—
Ipswich Gas Light Co.		1	1	0	—
Irlam U.D.C.		1	1	0	—
Jast, Mrs. L. S.	Bath	10	6		—
Jennison, Mrs.	Eastbourne	1	1	0	—
Johnson, L. C.	London	10	6		—
Kerfoot, T.	Prestwich	3	3	0	—
Kershaw, J. B. C.	Colwyn Bay	10	6		—
Kildwick Parish Gas Co. ...		1	1	0	—
Lacey, Stephen	London	2	2	0	—
Lamb, Mrs. H. C.	Manchester	1	1	0	—
Lancashire & Cheshire Gas Exhibit Committee	Manchester	—			2 2 0
Langford, A. S.	Heaton Moor	10	6		—
Lea Bridge District Gas Co.		3	3	0	—
Lea Recorder Co.	Manchester	2	2	0	—
Lees, Dame Sarah	Oldham	5	0	0	—
Lees, Miss M.	Oldham	1	1	0	—
Lec. Miss D. C.	Oxford	1	1	0	—
Leeds Corp. Gas Dept.		5	0	0	—
Leeds Corporation		10	10	0	—
Leicester Corp. Gas Dept....		1	1	0	—

Name	Town	Subscriptions			Donations
Leicester Corporation		10	10	0	—
Lincoln Corporation		2	2	0	—
Liptak Furnace Arches Ltd.	London	1	1	0	—
Liverpool Gas Company		10	10	0	—
Liverpool Corporation		3	3	0	—
London, City of, Electric Lighting Co.	London	2	2	0	—
London and Counties Coke Association	London	1	1	0	—
London Electric Supply Association	London	—	—	—	10 10 0
London Power Company ...	London	1	1	0	—
Longley, J. A.	London	1	1	0	—
Lowestoft Water and Gas Company		2	2	0	—
Low Temperature Carbon- isation Ltd.	London	5	5	0	—
Luton Gas Company		2	2	0	—
Lytton, Hon. Neville S.	London	1	1	0	—
Maidstone Gas Company ...		1	1	0	—
Manchester Corporation		26	5	0	—
Manchester Corp. Gas Dept. Manchester Corp. Elec. Dept.		5	5	0	—
Dept.		2	2	0	—
Mather, L. E.	Newton Heath	1	1	0	—
Melland, B. M. (1933)	Manchester	10	0	—	—
Melland, B. M. (1934)	Manchester	10	0	—	—
Melland, Will	Manchester	5	0	0	—
Melland, Mrs. Will	Manchester	1	1	0	—
Mid-Kent Gaslight & Coke Company		1	1	0	—
Mirfield U.D.C.		1	1	0	—
Moore, S. H.	Chester	10	6	—	—
Morgan, D. & Sons	Cardiff	1	1	0	—
McWilliam, Dr. H.	Liverpool	10	6	—	—
Newcastle - upon - Tyne and Gateshead Gas Company		1	1	0	—
Newcastle-upon-Tyne Corp		5	5	0	—
Newton, Lord	London	1	1	0	—
Nicholson, P. B., J.P.	Wath-upon-Dearne	10	6	—	—
Nottingham Corporation ...		5	5	0	—
Oldham Corp. Gas Dept. ...		2	2	0	—
Oldham Corporation		5	5	0	—
Oxford & District Gas Co.		1	1	0	—
Parkinson Stove Co. Ltd. ...	Birmingham	2	2	0	—
Payne, Mrs. A. L.	London	1	0	0	—
Peake, H.	Newark	10	6	—	—
Pearson, Dr. S. Vere	Mundesley	10	0	—	—
Pilcher, G. T.	Godalming	1	1	0	—
Pontefract Brothers	Manchester	1	1	0	—
Poplar Corporation		1	1	0	—
Portsmouth Gas Company..		1	1	0	—
Power Gas Corporation ...	Stockton-on-Tees	1	1	0	—
Powell, Major-Gen. S. H. ...	Walmer	1	0	0	—

Name	Town	Subscrip- tions	Donations
Prentice, Dr. W. H. (1933)	Salford	1 1 0	—
Prentice, Dr. W. H. (1934)	Salford	1 1 0	—
Preston Corporation		1 1 0	—
Preston Gas Company		1 1 0	—
Preston, J. Roger	Southport	10 6	—
Radcliffe U.D.C.		1 1 0	—
Radiation, Ltd.	London	5 5 0	—
Redditch Gas Company		1 1 0	—
Reed, H. A.	Chelsea	10 6	—
Refuge Assurance Co.	Manchester	5 5 0	—
R h o n d d a, Viscountess (1933)	London	10 6	—
R h o n d d a, Viscountess (1934)	London	10 6	—
Richmond (Surrey) Corp.		1 1 0	—
Ripon Gas Committee		1 0 0	—
Robertson, R.	Bristol	10 6	—
Robinson, Mrs. S.	Hale	10 0	—
Rochdale Corporation		3 3 0	—
Royton U.D.C.		1 1 0	—
Russell, Miss D.	London	10 0	—
St. Helens Corporation		1 1 0	—
Salford Corp. Gas Dept.		2 2 0	—
Salford Corporation		1 1 0	—
Sanger, Mrs.	London	1 0 0	—
Sanitary Inspectors' Assoc.	London	1 1 0	—
Scarborough Gas Company		1 1 0	—
Scottish Branch N.S.A.S.	Glasgow	2 2 0	—
Seale, Mrs. I. L.	Prestatyn	10 6	—
Shaw, Mrs. Bernard	London	3 3 0	—
Shaw, Mrs. J. (1933))	Alderley Edge	10 6	—
Shaw, Mrs. J. (1934)	Alderley Edge	10 6	—
Shaw, Sir Napier	London	2 2 0	—
Sheffield Gas Company		1 1 0	—
Sheffield, Rotherham and District Smoke Abate- ment Committee	Sheffield	25 0 0	—
Shrewsbury Gas Light Co.		1 1 0	—
Siedler, Dr. P. (1933)	Germany	15 0	—
Siedler, Dr. P. (1934)	Germany	15 0	—
Simon, Sir Ernest	Manchester	2 2 0	—
Simpson and Godlee, Ltd.	Manchester	1 1 0	—
Smalley, Dr. A. A.	Bowdon	1 0 0	—
Smethwick Corporation		2 2 0	—
Smith and Wellstood, Ltd.	London	1 1 0	—
Smoke Prevention, Ltd.	London	1 1 0	—
Société pour les Développe- ment des Véhicules Elec- triques	Paris	1 1 0	—
Solihull Gas Company		1 1 0	—
Southern, G. W.	Sheffield	1 1 0	—
Southampton Gaslight and Coke Co.		1 1 0	—
South Metropolitan Gas Co.	London	26 5 0	—

Name	Town	Subscriptions			Donations
South Shields Gas Co.		1	1	0	—
Spenborough U.D.C. Gas Dept.		2	2	0	—
Stalybridge Corporation		1	1	0	—
Stockport Corporation		2	2	0	—
Stoke-on-Trent Corporation		5	5	0	—
Stoke-on-Trent Corporation Gas Department		1	1	0	—
Stourbridge Corp. Gas Department		1	1	0	—
Stretford and District Gas Board		1	1	0	—
Stretford Corporation		2	2	0	—
Sunderland Gas Company...		1	1	0	—
Sunderland Corporation		5	5	0	—
Sunlight League of New Zealand	Christchurch	10	6		—
Swindon United Gas Co. ...		1	1	0	—
Tanner, A. E.	Manchester	2	2	0	—
Taylor, H. F.	Disley	10	6		—
Thomas, J. W.	Manchester	10	0		—
Thompson, Dr. A. Hugh ...	London	10	6		—
Thompson, Dr. M. B.	Rotherham	1	1	0	—
Tipton U.D.C. Gas Dept. ...		1	1	0	—
Tootal, Broadhurst, Lee & Co.	Manchester	3	3	0	—
Tottenham & District Gas Company		—			5 5 0
Tottenham U.D.C.		1	1	0	—
Trezise, W. E.	Wolverhampton ...	1	1	0	—
Trier, J. Newton	London	1	1	0	—
Troup, Lady	London	10	0		—
Turbine Furnace Co. Ltd.	London	1	1	0	—
Tustin, A.	Sheffield	10	6		—
Uxbridge, Maidenhead, Wycombe & District Gas Company (1933)		1	1	0	—
Uxbridge, Maidenhead, Wycombe and District Company (1934)		1	1	0	—
Des Vœux, Dr. H. A.	Lymington	2	2	0	—
Wakefield Gaslight Co.		1	1	0	—
Walsall Corporation		1	1	0	—
Wandsworth & District Gas Company		5	5	0	—
Warner, A.	London	1	0	0	—
Warrington Corporation		2	2	0	—
Waterhouse, Mrs. S.	Bakewell	2	0	0	—
Westminster Corporation ...		1	1	0	—
Weston - super - Mare Gaslight Company		1	1	0	—
Whessoe Foundry and Engineering Co. Ltd.	Darlington	1	1	0	—
Whitehead, A.	London	1	1	0	—

Name	Town	Subscrip- tions	Dona- tions
Widnes Corporation		1 1 0	—
Wigglesworth, Miss E.	Rawtenstall	10 0	—
Willesden Corporation		1 1 0	—
Willey, & Co.	Leicester	2 2 0	—
Winchester Water & Gas Company		1 1 0	—
Wolverhampton Gas Co. ...		2 2 0	—
Wolverhampton Corp. Elec. Dept.		1 1 0	—
Woodall-Duckham Co.	London	5 5 0	—
Wrexham Corporation		1 1 0	—
York Corporation		1 1 0	—
York Gas Company		10 0 0	—
Young, Mrs. T. M.	Withington	10 6	—
White, Mrs. C. Prosser, Life Membership Sub- scription		25 0 0	—
Subscriptions under 10/- ...		14 10 0	—
		<hr/>	
		£755 2 6 119 7 6	
		<hr/>	

THE NATIONAL SMOKE ABATEMENT SOCIETY.

Income and Expenditure Account, for Year ended June 30th, 1934

1933.			INCOME.			1933.			EXPENDITURE.				
£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.		
735	4	0	Subscriptions	755	2	6	421	12	6	Salary of Secretary and Typist.....	427	0	0
217	0	0	Donations	119	7	6	99	10	7	Rent, Rates, Gas, Water and Electricity	118	0	10
62	6	1	Sale of Literature	36	3	4	244	0	9	Printing, Stationery and Advertising ...	241	9	4½
53	11	0	Conference Fees.....	59	4	3	28	14	9	Travelling Expenses	40	14	1
			Dividends from Investments :				125	1	10	General Expenses, Postage & Telephone	121	14	4
			Comm. Union Assur. Co. Ltd.	8	0	11	5	12	2	Furniture and Fittings	5	1	6
			L. M. & S. Rly. Co.....	9	7	8							
12	19	7		17	8	7	924	12	7		£954	0	1½
			Interest—M. & S. Savings Bank	8	9	9	158	4	4	Surplus of Income over Expenditure ...	42	8	2½
1	16	3	Sundry Receipts	0	12	5							
1082 16 11			£996 8 4			1082 16 11			£996 8 4				

Balance Sheet, June 30th, 1934.

Surplus as at June 30th, 1933.....	1020	3	11	£	s.	d.	£	s.	d.
Add Excess of Income over Expendi- ture	42	8	2½	—	1062	12	1½		
				£	1062	12	1½		

Investments—		£	s.	d.	£	s.	d.
Commercial Union Ass'nce Co. Ltd.							
10 £2/10/- Shares fully paid at cost	205	11	0				
London, Midland & Scottish Rly. Co.							
£313 4% Debenture Stock at Cost	279	5	11				
Manchester & Salford Savings Bank.							
Deposit	258	9	9	—	743	6	8
					319	5	5½
Cash in Bank and in hand, June 30th, 1934				£	1062	12	1½

September 17th, 1934.

ABBOTT & SON, Chartered Accountants,
40 South King Street,
Manchester, 2.

MEMBERSHIP FORMS

INDIVIDUAL.

*To the General Secretary, National Smoke Abatement Society,
36 King Street, Manchester, 2.*

Kindly admit the undersigned as a Member/an Associate of
the Society. A first Annual Subscription is enclosed, to date
from 193

Signed

Address in full.....

.....

.....

Minimum Subscription for members (including Journal)	10/6.
Associate Subscription	5/-.
Life Membership Subscription	£25.

COMMERCIAL FIRMS AND AFFILIATED MEMBERS.

(See Constitution, Sections 3 and 4).

*To the General Secretary, National Smoke Abatement Society,
36 King Street, Manchester, 2.*

Kindly admit the undersigned as a member of the Society.
A first Annual Subscription of £ : : is enclosed,
to date from 193

Signed

On behalf of

Address

Representative(s) appointed

.....

Address Communications to { Firm
Representative.

Minimum Subscription, One Guinea.

DONATION FORM.

*To the General Secretary, National Smoke Abatement Society,
36 King Street, Manchester, 2.*

I enclose £..... as a donation to the Society, and
would be pleased to receive notices, literature, etc., from time
to time. (Delete latter clause if desired).

Signed

Address

.....

.....

To be forwarded to the Society.

BANK ORDER FORM.

To the Manager,

The Bank.

Please pay the sum of £ : : immediately
and on the same date in each succeeding year until further notice,
to the credit of the NATIONAL SMOKE ABATEMENT SOCIETY, with
the Manchester and County Bank Ltd., 55, King Street, Manchester.

Signed

Address

.....

.....

Date193

FORM OF BEQUEST.

“I give free of duty to the National Smoke Abatement Society
of 36, King Street, Manchester, the sum of £.....to be
applied to the general purposes of the said Society, and I declare
that the receipt of the Treasurer for the time being shall be a
sufficient discharge to my Executors for the same.”



Help the Hospitals

is one of the most familiar of appeals and one that rarely fails to excite compassion. The hospitals must have direct help for their great work of the curing of disease, but too few people have realized that they also can be helped by reducing the work they have to do. Prevention, it has wisely been said, is not merely better than cure ; it is the only cure. Men and women of goodwill by helping the hospitals assist the cure of disease ; by supporting positive health work such as that of the National Smoke Abatement Society assist the prevention of disease. Remember prevention as well as cure when making your donations or considering your legacies ; and remember that purifying the atmosphere and restoring cleanliness and light to our towns is a preventive work of lasting value.



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The National Smoke Abatement Society

150 proofs r
1266 copies - October 22nd 1936.



19-15-0.

SIXTH
ANNUAL
REPORT
1935-6

SIXTH ANNUAL REPORT

of the

National Smoke Abatement Society

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1935
 36 KING STREET
 MANCHESTER, 2.

National Smoke Abatement Society

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	Coun. W. Brownhill Smith, M.V.O., O.B.E., D.L.

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Charles Gandy.	A. E. Tanner.
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 ST. HELENS.—Alderman T. Hamblett, J.P., Dr. Frank Hauxwell, M.B., Ch.B., D.P.H.
 STOKE-UPON-TRENT.—
 STRET福德.—Alderman J. W. Dorran, Dr. E. H. Walker, M.B., Ch.B., D.P.H. (Executive).
 SUNDERLAND.—Councillor J. Cohen, Councillor E. W. Ditchburn.
 SWANSEA.—
 TOTTENHAM.—Chairman of Health Committee, Medical Officer of Health.
 WAKEFIELD.—Alderman S. Butterworth.
 WALLASEY.—Dr. Ronald B. Berry, Alderman D. P. Charlesworth.
 WALSALL.—Alderman Henry Hucker, J.P., Dr. J. A. M. Clark, M.D., M.B., Ch.B., D.P.H.
 WARRINGTON.—
 WESTMINSTER.—Dr. A. J. Shinnie, M.D., D.P.H., Councillor Mrs. Alderson Horne.
 WIDNES.—Councillor T. Smith, Councillor E. Hesketh.
 WILLESDEN.—
 WOLVERHAMPTON.—Dr. R. H. H. Jolly, M.D., D.P.H.
 WREXHAM.—

Honorary Advisors :

ATMOSPHERIC POLLUTION.—Sir Napier Shaw, and Dr. J. S. Owens.
 HEALTH.—Sir Leonard Hill, Sir Frederick Menzies, and Professor P. S. Lelean.
 STEAM RAISING PROCESSES.—Messrs. J. B. Jones, E. W. L. Nicol, and H. L. Pirie.
 METALLURGICAL PROCESSES.—Mr. E. C. Evans.
 DOMESTIC HEATING.—Dr. Margaret Fishenden.
 GAS INDUSTRY.—Sir Francis Goodenough, and Dr. E. W. Smith.
 ELECTRICAL INDUSTRY.—Mr. A. P. M. Fleming, and Lt.-Col. W. A. Vignoles.
 HON. AMERICAN CORRESPONDENT.—Mr. H. B. Meller, Pittsburgh.

Information Concerning the Society.

The National Smoke Abatement Society was formed in 1929 by the amalgamation of the Coal Smoke Abatement Society (1899) and the Smoke Abatement League of Great Britain (1909). It is an organization dependent entirely upon voluntary support, and its objects and the conditions of membership will be found in the constitution, on another page.

Offices.—Central (General Secretary's) Offices : 36, King Street, Manchester, 2. Tel. : BLackfriars 0896.

London Office : 71, Eccleston Square, S.W.1. Tel. Victoria 9274

Scottish Branch : City Chambers, Glasgow.

Lectures.—The Society will endeavour to supply lecturers on smoke abatement in any part of the country. As a rule, the only charge is for the travelling expenses of the lecturer. The services of the Secretary of the Society are generally available for lectures.

Exhibits.—The Society is prepared to loan smoke abatement exhibits, suitable for use at health and other exhibitions, free of charge ; or to take and equip stands at such exhibitions. A list of exhibits available will be sent on request.

Lantern Slides.—The Society possesses a large number of lantern slides dealing with various aspects of smoke abatement. These will be loaned for the use of lecturers at a charge of one penny per slide, plus postages. A catalogue of the slides will be sent on request.

Posters.—Slogan posters, size 30 in. by 20 in., four kinds, printed black and green, can be purchased at 4d. each. Large pictorial posters, printed three colours, for use on ex-E.M.B. Frames ; 10/- per set (7/6 to Affiliated Authorities).

Shade Cards for Smoke Inspection.—Tinted shade cards, showing different densities of smoke, of which the denser tints have been adopted as nuisances by magistrates hearing coal smoke complaints, are available at a price of 6d. each.

Information and Advice.—The Society is glad, at any time, to be of assistance to any person requiring information on smoke abatement and related matters. Inquiries should be addressed to the General Secretary, at 36, King Street, Manchester 2.

List of Publications

(All prices include postage. Reduced Prices for Quantities).

Smoke Abatement Handbook. A *vade-mecum* on all aspects of the smoke nuisance and its abatement. Indispensable to all who are concerned with the subject. 8vo. pp. 48. 6d., 5/- per dozen copies.

The Journal of the N.S.A.S. The Journal is not a record of proceedings but a magazine—the only one in the world—devoted to the problems of atmospheric pollution. Contains authoritative articles, notes on technical subjects, news of activities of every kind, and in general keeps the reader up-to-date in every aspect of the subject. Per annum, 2/6. Gratis to members.

The Law Relating to Smoke and Noxious Fumes by the late Randolph A. Glen, M.A., LL.B., Cantab, (Editor of "Glen's Public Health," etc.). With a foreword by Sir Lawrence Chubb. A comprehensive and practical survey of the legislative side of the problem, written by an authority. 8vo. pp. 24. 1/-.

Fumifugium; or the Smoake of London Dissipated, by John Evelyn. This rare and fascinating book, first published in 1661 by command of Charles II., has been republished by the Society with an introduction by Miss Rose Macaulay. In spite of its age this indictment of the smoke evil by the author of the famous Diaries remains true, witty, and penetrating. Illustrated with original wood engravings and a portrait of Evelyn. Paper covers, 6d. Cloth-bound, 1/6.

Smoke and Fumes Nuisances from Road Vehicles. The technical and scientific aspects by Dr. J. S. Owens, A.M.Inst.C.E., M.I.Mech.E., and the legal position by R. P. Mahaffy, M.A. 8vo. pp. 16. 3d.

Smoke and Health by Dr. J. S. Taylor, M.D., D.P.H., Assistant Medical Officer of Health, Manchester. 8vo. pp. 12. 2d.

How the Citizen Takes the Air. The Personal Significance of the Smoke Problem. A delightfully written paper by Mrs. Millicent Jast. 8vo. pp. 16. 2d.

Smoke and Aviation. Full Report of the 1935 Conference on this subject. Four papers in full and discussions. "Smoke and Visibility" by C. S. Durst, B.A., Assistant Superintendent,

Meteorological Office, the Air Ministry. "The Effects of Smoke upon Flying Conditions" by William Courtenay. "The Effects of Smoke upon Flying in the North" by Alan Goodfellow. "Visibility and Smoke in Relation to Aerial Photography" by Captain Alfred G. Buckham, F.R.P.S. With photographic illustrations. 8vo. pp. 40. 1/-.

Smokeless Open-Grate Fuels. Report of the Symposium held in 1934. Papers and discussions on all types of solid fuels, their uses and requirements by E. K. Regan, E. W. L. Nicol, Col. W. A. Bristow, H. Cerckel, Mrs. G. H. Miles, Dr. G. E. Foxwell, John Roberts, and Dr. E. W. Smith. 8vo. pp. 60. 1/-,

The State of the Atmosphere. "An Examination into the Effects of Atmospheric Pollution on Building Stones, etc., with a Preliminary Summary of the Conditions Disclosed by various Enquiries into the State of the Atmosphere of Great Britain," by Sir Frank Baines, K.C.V.O., C.B.E., F.R.I.B.A. An invaluable survey of the subject. Royal 8vo. pp. 36. 6d.

Home Fires Without Smoke. Edited by Cyril Elliott and Marion Fitzgerald. 8vo. pp. 59. Cloth-bound remainders, 6d.

Smoke Abatement in Salt Lake City, Utah. A full and illuminating report of the intensive and successful campaign in Salt Lake City. 8vo. pp. 43. 3d.

The Smokeless Home. A popular 12-page illustrated pamphlet, with cover in colours, describing the ways and means for making the home smokeless. To be sold in quantities for general distribution. Single copies gratis. £5 per 1,000.

N.S.A.S. Annual Reports. Gratis, by Post 1d.

PROCEEDINGS OF THE ANNUAL CONFERENCES. Each with all papers in full, and discussions. 8vo. Price 1/- each.

Newcastle, 1932. Presidential Address and papers on: "The Domestic Smoke Problem: the Possibilities of Coke-Oven Fuel"; "The Psychological Effects of Smoke"; "The Human Element: A Factor in Smoke Abatement."

Sheffield, 1933. Presidential Address and Resolutions, and papers on: "The Five-Years Clause and other Matters arising from the Public Helath (Smoke Abatement) Act, 1926"; "How the Citizen Takes the Air: The Personal Significance of the Smoke Problem"; "The Combating of Domestic Smoke in Industrial Areas."

Glasgow, 1934. Presidential Address and Resolutions, and papers on: "The Measurement of Atmospheric Pollution"; "The Effects of Smoke upon Visibility and Aviation"; "The Effects of a Smoke-Laden Atmosphere on Horticulture"; "Nature in Beautiful"; "Slum Clearance and the Smoke Problem."

Bristol, 1935. Presidential Address on "Barbarism," Resolutions, and Papers on: "The Sources of Atmospheric Pollution"; "Smokeless Equipment in Housing Schemes—Electrical, Gas, and for Solid Fuels"; "Smoke and the Countryside"; and "Dust and Grit Emission from a Sanitary Inspector's Viewpoint."

Separate Conference Papers. Reduced to 1d. each.

"The Progress of the Electrical Grid"; "The Production and Use of the New Smokeless Fuel 'Dryco' in Liverpool"; "Atmospheric Pollution as Affecting Visibility"/and "Visibility as Affecting Aviation"; "The Fuel of the Future" (Gas); "Powdered Fuel and the Smoke Problem"; "How Electricity Can Help in Abating Smoke"; "Power from Sources other than Coal"; "Furnace and Tank Boiler Design"; "The Smoke Inspector and the Cost of Production."

Published by Other Organizations:

"Smoke Abatement and Fuel Economy in Steam Boiler Practice" (Manchester and District Regional Smoke Abatement Committee). pp. 11. 1d., post 2d.

"The Open Fire," (Manchester Air Pollution Board). 1d., post 2d.

"The Black Smoke Tax." Report of an extensive investigation into the cost of smoke in Manchester. (Manchester Air Pollution Board). 1d., post 2d.

READY, NOVEMBER 1935.

PROCEEDINGS OF THE BRISTOL CONFERENCE.

Papers by Dr. H. A. DES VŒUX, Dr. R. LESSING,
Dr. A. G. RUSTON, GEO. S. FRANCIS,
G. L. JENNINGS, JOHN W. BEAUMONT,
and L. H. DIBBLIN.

Text and Discussions in full. 1/- each. 7/6 per dozen.

CONSTITUTION OF THE SOCIETY.

1. **NAME.**—The Society shall be called the NATIONAL SMOKE ABATEMENT SOCIETY.

2. **OBJECTS.**—The Society shall be concerned with the prevention of air pollution generally, and in particular, that arising from coal smoke.

The objects of the Society shall be :—

- (a) To create an informed public opinion on the evils of air pollution.
- (b) To inquire into, and if thought advisable, assist investigations directed towards the abolition of smoke, whether industrial or domestic.
- (c) To take steps to popularize the use of smokeless methods of heat and power production.
- (d) To promote and support legislation for preventing the pollution of the atmosphere.

3. **MEMBERSHIP.**—The Society shall consist of :—

- (a) Life Members.
- (b) Members.
- (c) Associates.
- (d) Affiliated Members.

Life Members.—A donation of not less than twenty-five guineas paid in one amount by any individual, shall constitute the donor a member for life.

Members.—An Annual Subscription of not less than half a guinea in the case of an individual, or one guinea in the case of a commercial firm, shall constitute the subscriber a member. A commercial firm registered as a member shall be entitled to nominate a representative to exercise the privileges of membership as regards attendance at meetings, voting, etc.

Associates.—An Annual Subscription of not less than five shillings shall constitute that subscriber an Associate.

Affiliated Members.—The payment of not less than one guinea by any Local Authority, Society or Institution, shall constitute the subscribing body an Affiliated Member. The affiliated Member shall be entitled to appoint two representatives to the Council of the Society, who shall receive the privileges of full membership of the Society.

4. **PRIVILEGES OF MEMBERSHIP.**—The privileges of membership shall include :—

- (a) Advice and assistance in questions relating to smoke abatement and fuel economy as far as the circumstances of the Society will permit.
- (b) Free admission to lectures arranged by the Society.
- (c) The right to receive free of cost, the general publications of the Society as they appear, including the Journal of the Society. Associates shall not, however, receive the Journal and such other literature as may be decided upon from time to time.

5. **THE COUNCIL.**—The Council of the Society shall consist of the Officers, the members of the Executive Committee, two representatives from each Affiliated Member, together with not more than thirty members to be elected annually at the General Meeting.

The business of the Council shall be to direct the policy of the Society in general and to receive any periodical reports from the Executive or other committee.

The Council shall meet at least twice a year, of which at least one meeting shall take place in London.

6. **THE EXECUTIVE COMMITTEE.**—The Executive Committee shall consist of the Officers and not less than twelve members or representatives of Affiliated members, who shall be elected annually at the General Meeting of the Society. The Executive Committee shall have power to appoint sub-committees, and to co-opt additional members. Five shall form a quorum.

The Committee shall meet as required, and the place of meeting shall be at the central offices of the Society, or other place at the discretion of the Committee.

The business of the Committee shall be to manage the affairs of the Society.

7. **OFFICERS.**—The Officers of the Society shall be President, Vice-President and Honorary Treasurer, to be elected annually. The Chairman of the Committee and of the Council, shall also be Officers, but shall be elected by their respective Committees.

8.—**GENERAL MEETING.**—The General Meeting of the Society shall be held annually at which shall be presented the Annual Report and the Audited Financial Statement, and at which the Officers, the Council and the Executive Committee for the following year shall be elected. Other general meetings shall be held on the requisition of the Council or Executive Committee, or of 20 members of the Society. One month's notice shall be given of all General Meetings.

9. **ALTERATION TO CONSTITUTION.**—No change shall be made in the constitution of the Society, except by a two-thirds majority of the members present and voting at the Annual Meeting or at a Meeting called specially for the purpose. A notice in writing of any resolution to be submitted for this purpose must be sent to all members of the Society at least a fortnight before the Annual or Special General Meeting.

10. **ACCOUNTS.**—Accounts shall be kept of all moneys received and expended by the Society, and once at least every year the accounts of the Society shall be examined and the correctness thereof certified by a qualified auditor.

11. **BRANCHES.**—Branches of the Society shall be constituted, as far as possible, in the town or districts of the United Kingdom, to deal with local smoke abatement and air pollution problems. Branches shall settle their own constitution and terms of membership, but shall pay an affiliation fee of at least sixpence for every individual member and of two shillings and sixpence for every firm affiliated to the National Society, except in the case of members who are also members of the National Society. Members of the Branches who are not also members of the National Society shall be entitled to attend the General and other meetings of the Society, but shall not be entitled to vote thereat. The Branch shall, however, appoint two delegates to the Council of the National Society and to the Annual General Meeting, who shall have full voting powers.

12. **JOURNAL AND LITERATURE.**—A copy of each issue of the Journal of the Society, together with all other current general literature shall be sent free to each member and delegate from each Affiliated member ; to the Town Clerk of each affiliated Local Authority, and to the Secretary of each affiliated Society or Institution.

13. **INTERPRETATION OF CONSTITUTION.**—The interpretation of these rules together with any question on which the rules are silent shall be decided by the Executive Committee until the next Annual General Meeting.

SIXTH ANNUAL REPORT

for the Year ended June 30th, 1935

General Review.—The year under review has been the most satisfactory on record, and more clearly than ever is it to be seen that real progress is being made and that the movement is advancing at an accelerating rate. It is difficult for those actively concerned to obtain an objective view of the state of public opinion, but the actuality of the change that is taking place is indicated in a significant paragraph in the recently published Annual Report on Alkali, etc., Works, presented to the Minister of Health by the Chief Inspector :

“There is no doubt that the public is more concerned than ever about air cleanliness, both as regards pollution by smoke and by dust as well as by offensive gases. Local authorities, too, are becoming more interested and have frequently appealed to the Minister for advice and assistance in dealing with difficult problems.”

We feel that we may justly claim that this is largely due to the years of persistent effort by the Society, its forerunners, and the Regional Committees.

Public and Press discussion largely centres upon the use of smokeless methods in the home, and much interest has been aroused by the smokeless housing estates that are now beginning to appear. While the use of electricity and gas continues quietly to expand, the open fire, which in the present state of opinion could not be abolished even if it were desirable to do so, arouses much interest, and may be said to have entered, although it has a long way to go, upon the road to reform. The high qualities of low temperature carbonization and other free-burning fuels, and the efficiency and convenience of the several makes of coke-burning grates, are responsible for the gradually growing understanding that smoke and open fire need not be inseparable.

That this view is becoming more general is confirmed by the desire of those concerned with the domestic sale of raw coal to discover and develop a smokeless open coal fire. The statement that smoke is a bad advertisement for coal is an admission that the public are becoming conscious of the smoke evil and that when conscious of it, they will demand its abolition.

The National Smoke Abatement Society naturally welcomes the decision to institute research for a smokeless coal fire, and will as willingly advocate the use of such a fire as of any other smokeless method. The difficulties that we have yet to overcome in abolishing

domestic smoke are so enormous that there is ample scope for every possible ally. Further, we would welcome the development of a smokeless coal fire if only to secure the interest, instead of the antagonism, of certain sections of the coal industry which actively oppose smoke abatement because it means the sale and use of coal in forms other than the traditional.

That such opposition should be developing is yet another sign of the growing importance of the movement, and although the interest and discussion it creates assists rather than injures our cause, its existence must be deplored from the point of view of the future development and prosperity of the coal industry.

A report of considerable importance, not only in itself, but in the precedent it is hoped it has established, is that of a special Committee appointed by the Manchester City Council, which was instructed to inquire into "the desirability and practicability of making available to the public smokeless fuels, including gas and electricity, at such cost (not including a charge upon the rates) in relation to raw coal as will permit their use in preference to coal, and thus make a definite contribution to a cleaner atmosphere."

The recommendations of the Committee, which are quoted in full, together with extracts from the Report, in the August, 1935 issue of the Society's *Journal*, are for the use of coke in fifty Corporation houses for a trial period of twelve months, the testing for a similar period of various smokeless fuels in the Town Hall and the consideration by the Gas Committee of the installation of a low temperature carbonization plant. The Committee also appeals to the public to experiment with smokeless fuels.

Glasgow Conference.

By invitation of the Corporation, the sixth Annual Conference was held in Glasgow in co-operation with the Scottish Branch, on September 27th, 28th and 29th, 1934. It was the best attended of the series, there being 195 members, delegates, and visitors. The papers read, which were subsequently printed and circulated in the *Proceedings*, were: "The Measurement of Atmospheric Pollution," by Dr. J. S. Owens; "The Effect of Smoke upon Visibility and Aviation," by Mr. Oliver Cochran; "The Effect of a Smoke-laden Atmosphere upon Horticulture," by Mr. Wm. D. Besant; "Nature is Beautiful," by Bailie W. Brownhill Smith; and "Slum Clearance and the Smoke Problem," by Dr. J. Johnstone Jervis.

The Society was honoured by a reception and dance given by the Lord Provost of Glasgow, and was entertained on the Saturday afternoon by the Glasgow Waterworks Committee to a tour to Loch Katrine and the Trossachs. Resolutions passed at the Conference are given below.

Resolution on Grit Emission.

The following Resolution was adopted by the Conference :

“THAT this Conference of the National Smoke Abatement Society recommends that the Government set up a Committee to investigate and report upon measures to be employed to abate nuisances arising from the use of pulverized fuel, and that special consideration be given to the abatement of nuisances arising in connection with generating stations or other statutory undertakings.”

“THAT all Local Authorities be circulated asking them to pass a resolution on similar lines and that such resolutions be sent to the Minister of Health and their respective Members of Parliament.”

In accordance with the terms of the Resolution copies were sent to the Minister of Health and to all local authorities, excepting Rural Districts, in England, Wales, and Scotland. Intimations were received from 124 authorities that the Resolution had been considered. In 30 cases it was decided to take no action ; and in 91 cases the Resolution was supported and similar resolutions forwarded to the Minister of Health.

The reply of the Minister of Health, both to the society and the supporting local authorities, was that the ground had been covered by the Report to the Electricity Commissioners, published in 1932, on “The Measures which have been taken in this Country and in others to Obviate the Emission of Soot, Ash, Grit, and Gritty Particles from the Chimneys of Electric Power Stations.”

This reply was considered at a meeting of the Council held on May 30th., when it was resolved to send a further communication to the Minister, pointing out that the Report mentioned was of value where new Power Stations were concerned, but did not solve the problem of existing stations, nor of grit and dust nuisances that may arise from other types of steam-raising plant. The following suggestion was made in this letter :

“Your Ministry has Inspectors under the Alkali Acts, who visit works and advise and insist upon certain requirements, and a Local Authority can obtain advice and assistance in helping them with such problems.

The Council considers that similar procedure, advice, and assistance should be available to any Local Authority faced with this grit problem, and on request your Ministry's Inspector should have the power to investigate and recommend what measures should be taken to overcome the nuisance. This expert technical advice and recommendation would be the Local Authority's ground in enforcing any legal action.”

Housing Resolution.

The following Resolution was also adopted by the Conference :

“THAT this Conference views with grave concern the slow progress made towards the solution of the domestic smoke problem, and urges the Government, in any new housing legislation to insist, as a condition of subsidy, that the heating arrangements in all houses to be erected under legislation, shall be of such a design as will obviate atmospheric pollution.”

This resolution was also circulated to Local Authorities throughout the country, and was supported by thirty-nine.

1935 and 1936 Conferences.

An invitation was received from the Corporation of Bristol to hold the 1935 Annual Conference in that City. The invitation was gratefully accepted by the Executive Committee. An invitation to hold the 1936 Conference in Leeds, has also been received and accepted.

Smoke and Aviation Conference.

In view of the importance of this aspect of the subject and because of the interest aroused by Mr. Oliver Cochran's paper at the Glasgow Conference, it was agreed to hold in London, after the customary Council Meeting, a special conference on “Smoke and Aviation.” This was held on May 30th, and was addressed by the following speakers :

Mr. C. S. Durst, B.A., Assistant Superintendent, Meteorological Office of the Air Ministry on “Smoke and Visibility.”

Mr. William Courtenay, on “The Effects of Smoke upon Flying Conditions.”

Mr. Alan Goodfellow, on ‘ The Effects of Smoke upon Flying in the North,’ and

Captain Alfred G. Buckham, F.R.P.S., on “Visibility and Smoke in Relation to Aerial Photography.”

The meeting, held in the Caxton Hall, Westminster, was only moderately attended, but the subsequent Press reports and editorial comments were extremely satisfactory and indicated the extent to which smoke is recognized to be a hindrance and danger to airmen.

The remarkable collection of aerial photographs exhibited by Captain Buckham has been purchased, as suggested at the meeting, by the Society for use in exhibition work and for reproduction.

Examinations for Boiler House Employees.

The City and Guilds of London Institute has accepted the recommendations of its Exploratory Committee, upon which the Society was represented, and has set up a scheme of examinations, and issued a syllabus, on this subject. The Society, with other smoke abatement organizations, is represented upon the Advisory Committee concerned.

Posters.

As stated in the last Annual Report, the Society has prepared a set of pictorial posters for use in the scheme organized by the Central Council for Health Education and local authorities. We were allocated a month's display in December, and the posters appeared on about 300 boards throughout the country. A further 20 sets were exhibited at the same time, at the Society's expense, on similar sites belonging to the London and North Eastern Railway Company. A further display will be made in December next.

Publications.

The *Journal*, which is now in its sixth year, continues to be published in conjunction with the Service Guild, Limited. As will have been noted, there has recently been a change of cover, a different photograph appearing with each issue. The change has been favourably received. The number of copies circulated each quarter has been increased. Copies of the *Journal*, it may be mentioned, are sent to public libraries throughout the country and to a number of libraries abroad.

Other publications include the Glasgow Conference *Proceedings*, the special appeal pamphlets, the booklet *The Smokeless Home*, and *Smoke and Aviation*, the report of the conference on this subject. Most important of all, perhaps, Mr. Randolph A. Glen's *The English Law Relating to Smoke and Noxious Fumes* was issued. This, it may be recalled, was written during Mr. Glen's unhappily fatal illness. It has been excellently reviewed, and so far about 500 copies have been sold. A small but steady sale seems likely for a long time to come, as it is the only handy precis of the legal side of the smoke question in print to-day.

Lectures and Exhibitions.

Many meetings have been addressed during the year on behalf of the Society, including addresses to the Merseyside and South-West Lancashire and the Northumberland and Durham Regional Smoke Abatement Committees, branches of the Electrical Association for Women at Newcastle-upon-Tyne, Bradford,

Wrexham, and Rugby, the Sale Rotary Club, and meetings at Manchester, Salford, Oldham, Middleton, etc.

The Society, as an affiliated health association of the Central Council for Health Education, has participated in Health Exhibitions at Walthamstow, Leeds, Gloucester, London, and Liverpool. The last two were held in Messrs. Selfridge's Stores in those cities. Material has also been loaned for other exhibitions.

Financial Position.

It will be seen from the statement of accounts that the income during the year, apart from receipts for posters and publications, is a little higher than for the previous year, there being a net increase of £64. The income, while fortunately not diminishing, does not rise to a level which will give adequate scope for the innumerable opportunities that are available, in spite of the fact that continued efforts are made to obtain new support.

At the present time a new appeal for financial support is being made to the principal local authorities which are not affiliated to the Society. This is being done much more thoroughly than in the past, and copies of special appeal pamphlets are being sent to each member of the Council, of the authorities selected. Thus, even if the direct financial result is not what is hoped for, the propaganda value of the appeal will be considerable.

A further attempt to obtain new subscriptions through a representative in London was made during the year, but unlike the similar work carried out a few years ago, was not successful.

Because of these appeals, and because of the unusually large cost of printing during the year, expenditure has been greater than usual, with the result that expenditure has exceeded income and the credit balance at the bank is reduced. Thus, unless further income can be secured, it will be necessary, during the forthcoming year, slightly to diminish the amount of propaganda activity.

Although it is customary at the Annual General Meeting to pass a resolution of thanks to the Society's Hon. Auditors, Messrs. Abbott and Son, for their valuable services, we feel that an opportunity should be taken in the printed report of expressing our grateful appreciation to them for a very practical way of assisting our work.

Obituary.

We regret to record the deaths, during the year, of two valued members, Dame Sarah Lees and Professor J. B. Cohen. Dame Sarah Lees was well-known in South-east Lancashire, and especially

in her native town of Oldham, of which she was a Mayor and the first Freeman. Her long and active life was devoted to many good causes, of which smoke abatement was not the least important.

Professor Cohen, a Vice-President, will be remembered for his enthusiasm for a cleaner atmosphere and for the scientific investigations he undertook at Leeds to demonstrate the extent of the harmful effects of smoke. His book "Smoke," written in collaboration with Dr. A. G. Ruston, remains one of the most informative of text-books on the subject.

CHARLES GANDY, *Chairman.*

WILL MELLAND, *Hon. Treasurer.*

ARNOLD MARSH, *General Secretary.*

SUBSCRIPTIONS AND DONATIONS

for the Year ended June 30th, 1935.

Name	Town	Amount
Acton Corporation		1 1 0
Acworth, A. W.	London	10 6
Acworth, Miss E. A.	London	1 1 0
Acworth, W. B. (1934)	London	2 2 0
Acworth, W. B.	London	2 2 0
Affleck and Brown, Ltd	Manchester	2 2 0
Allen, Rev. R. E. T.	Withington	10 0
Altrincham Gas Company		1 1 0
Anonymous		20 0 0
Arning, A. W.	Fallowfield	1 1 0
Ashton Bros. & Co. Ltd.	Manchester	2 2 0
Ashton Hoare & Co. Ltd.	Manchester	1 1 0
Ashton, Miss M.	Didsbury	1 1 0
Atkinson, Mrs. M.	London	3 0 0
Banbury Gas Company		1 1 0
Barber, Stanley S.	London	10 6
Barker, Sidney	Manchester	10 0
Barlow, Sir Thomas	London	10 6
Bath Corporation		1 1 0
Bath Gas Company		1 1 0
Batta, Prof. Georges	Liège	10 6
Baxendale and Co. Ltd.	Manchester	2 2 0
Beard, E.	Whalley Range ...	1 1 0
Beard, J. R.	Purley	1 1 0
Beckwith, J.	London	1 1 0
Bennett, Dr. J.	Warrington	10 6
Bethnal Green Corporation		1 1 0
Bibby, J., and Sons Ltd.	Liverpool	5 0 0
Bibby, Mr. & Mrs. H. P.	Birkenhead	2 0 0
Bingley U.D.C.		1 1 0
Birkenhead Corporation		2 2 0
Birmingham Corporation		5 5 0
Birmingham Corporation Gas Dept. ...		5 5 0
Blyth Gas Company		1 1 0
Bognor Gas and Electricity Company...		1 1 0
Bootle Corporation		5 5 0
Bournemouth Gas & Water Company...		2 2 0
Bracey, Dr. H.	Birmingham	10 6
Bradford Corporation Gas Department		1 1 0
Bray, George and Co. Ltd.	Leeds	1 1 0
Briggs, C. H.	London	10 6
Brighouse Corporation Gas Dept.....		2 2 0
Brighton Corporation.....		2 2 0
Brighton, Hove, & Worthing Gas Co. ...		3 3 0
Bristol Corporation		5 5 0
Bristol Gas Company		5 5 0
British Coal Distillation Co. Ltd.	London	1 1 0
British Commercial Gas Association ...	London	25 0 0
British Electrical & Allied Manu. Asso.	London	5 5 0

Name	Town	Amount		
British Electrical Development Assoc....	London	100	0	0
British Gas Light Co. Ltd.	London	2	2	0
British Medical Association	London	1	1	0
Brockhouse, John & Co.	West Bromwich ...	5	5	0
Brownlie, David	London	10	6	
Burnley Corporation		2	2	0
Burnley Corporation Gas Dept.		1	1	0
Bury, Miss Constance	London	10	0	
Bury Corporation		2	2	0
Buxton Corporation		1	1	0
Cable Markers' Association	London	10	0	0
Cadbury Bros. Ltd.	Bournville	2	2	0
Calverley & Horsforth District Gas Co.		1	1	0
Cambridge University & Town Gas Co.		1	1	0
Capper-Johnson, Dr. L.	London	10	6	
Cardiff Corporation		1	1	0
Cardiff Gas Light & Coke Company.....		1	1	0
Caroe, W. D.....	London	1	0	0
Carr, J. D.	Manchester	1	0	0
Carter, Sir E. Bonham	London	1	0	0
Cawthorn, Miss	Birbright	10	6	
Cheetham, Howard.....	Manchester	10	6	
Cheltenham & District Gas Company ...		1	1	0
Chester Corporation (1934)		1	1	0
Chester Corporation		1	1	0
Chester United Gas Company.....		2	2	0
Claye, Dr. E.	Stockport	10	0	
Clayton, R. H.	Manchester	2	2	0
Clegg, Ernest	Bradford	10	6	
Clevedon Gas Company		1	1	0
Cohen, Prof. J. B.	Coniston	10	6	
Commercial Gas Company	London	5	0	0
Coke Oven Managers' Assoc.		1	1	0
Cooper, Miss I.....	Bramhall	10	6	
Croydon Gas Company.....		5	5	0
Cuthbertson, J.....	London	1	1	0
D. & I. Smokeless Fuels Ltd.	London	1	1	0
Daniels, S. R.	Oxford	10	6	
Darlington Corporation.....		1	1	0
Dobson, Dr. G. M. B.	Oxford	1	1	0
Doncaster Corporation		1	1	0
Dudley, Brierley Hill & Dist. Gas. Co.		1	1	0
Duguid, Mr. & Mrs. S. N.	Lymm	1	1	0
Ealing Corporation		1	1	0
Eastbourne Gas Company		2	2	0
Edmonton U.D.C.		1	1	0
Elland Gas Company		1	1	0
Elsworthy, J. Gordon	London	1	1	0
Evans, Mrs. R.....	Dorking	1	0	0
Exeter Gaslight and Coke Company ...		2	2	0
* Falk, Stadelmann & Co. Ltd.	London	1	1	0
Failsworth U.D.C.		1	1	0
Farnworth U.D.C.		3	3	0
Finsbury Corporation		1	1	0

Name	Town	Amount
Fitton, Fred A.	Manchester	10 6
Fitzgerald, Miss M.	Manchester	10 6
Fletcher, G. H.	Sheffield	10 6
Flugel, Mrs.	London	10 0
Forster, A. Lindsay	Glasgow	1 1 0
Fothergill & Harvey, Ltd.	Littleborough	1 1 0
Fox, Frank	Wimbledon	10 0
Fry, Miss Agnes	Bridgwater	10 6
Fry, Miss Agnes (1936)	Bridgwater	10 6
Fry, Miss A. Ruth	Thorpness	1 0 0
Gaddum, H. E.	Bowdon	10 0
Gallenkamp, H. & Co. Ltd.	London	1 1 0
Gandy, Charles	Manchester	5 0 0
Gandy, Mr. & Mrs. Henry	Corbridge	1 1 0
Ganter, Douglas	Old Trafford	10 6
Gas Chambers & Coke Ovens Ltd.	London	1 1 0
Gas Engineers, Institution of.....	London	10 10 0
Gas Light and Coke Company	London	52 10 0
General Electric Company	London	5 5 0
Gerrard, A. Denis	Manchester	10 0
Gibson, R. E.	Liverpool	10 6
Gladstone, Lord	Hawarden	1 1 0
Glasgow Corporation Gas Department...		2 2 0
Gloucester Gas Light Company		1 1 0
Glover and Main, Ltd.	London	5 5 0
Godalming Gas & Coke Company		1 1 0
Godbert, C. W.	Clayton Bridge ...	1 1 0
Goodenough, Sir Francis	London	2 2 0
Great Grimsby Gas Company		1 1 0
Great Yarmouth Gas Company		2 2 0
Greenwich Corporation.....		2 2 0
Grime, J. Ernest	Manchester	10 6
Grimsby Corporation		1 1 0
Guildford Gas Light & Coke Company		2 2 0
Gurney, John	London	1 1 0
Hackney Corporation		1 1 0
Halifax Corporation Gas Department ...		10 10 0
Hammersmith Corporation		1 1 0
Hampstead Heath Protection Society...		1 1 0
Hancock, A.	Manchester	10 6
Hardy, G. & Co. Ltd. (1934)	Manchester	2 2 0
Hardy, G. & Co. Ltd.	Manchester	2 2 0
Harrogate Corporation		2 2 0
Hartlepool Gas & Water Company		1 1 0
Haworth U.D.C. Gas Department ...		1 1 0
Hay, Dr. John	Liverpool	10 6
Heating and Ventilating Engineers, Institution of	London	3 3 0
Herbert, Mrs.	Buxton	10 6
Herbert, Alfred Ltd.	Coventry	1 1 0
Herford, Miss Amy	Withington	10 0
Herne Bay Gas Company		1 1 0
Hessle Gas Company		1 1 0
Hexham Gas Company		1 1 0
Heywood Corporation Gas Dept. (1934)		1 1 0

Name	Town	Amount
Heywood Corporation Gas Dept. (1935)		1 1 0
Higgs, Mrs. M.	Oldham	10 6
Hoare, A.	London	10 6
Hocken, E. B.	Nottingham	10 6
Holborn Corporation		1 1 0
Holmes, W. C. & Co.	Huddersfield	5 5 0
Hope, Councillor Sidney, M.P.	Handforth	2 2 0
Horwich U.D.C.		1 1 0
Howden, James & Co.	London	1 1 0
Huddersfield Corporation		2 2 0
Hull Corporation		1 1 0
Huntley, C. Gordon	Manchester	10 6
Hutchinson, G. H.	Benwell	10 6
Hyde, Mrs. A.	London	1 0 0
Ideal Boilers & Radiators, Ltd.	Hull	5 5 0
Illingworth Carbonization Co. Ltd.	Bradford	1 1 0
Illingworth, S. E.	Harrogate	1 0 0
International Combustion Ltd.	London	1 1 0
Ipswich Gas Company		1 1 0
Irlam U.D.C.		1 1 0
Jast, Mrs. Stanley (1934)	Bath	10 6
Jast, Mrs. Stanley	Bath	10 6
Jennison, Mrs.	Eastbourne	1 1 0
Keeley, Robert.	Prestwich	10 0
Kensington Corporation		1 1 0
Kershaw, J. B. C.	Cheltenham	10 6
Lacey, Stephen	London	2 2 0
Lamb, Mrs. H. C.	Manchester	1 1 0
Lambeth Corporation		1 1 0
Langford, A. L.	Heaton Moor	10 6
Lancashire & Ches. Gas Exhibit Com.	Manchester	2 2 0
Lapage, Dr. C. P.	Manchester	10 6
Lea Bridge Gas Company		3 3 0
Lea Recorder Company	Manchester	2 2 0
Lee, Miss Dora C.	Oxford	2 2 0
Lee, Sir Kenneth	Manchester	1 1 0
Lees, Dame Sarah	Oldham	5 0 0
Lees, Miss Marjory	Oldham	1 1 0
Leicester Corporation		10 10 0
Leicester Corporation Gas Department		1 1 0
Lessing, Dr. R.	London	1 1 0
Lincoln Corporation		2 2 0
• Liptak Furnace Arches Ltd.	London	1 1 0
Liverpool Corporation		3 3 0
Liverpool Gas Company		10 10 0
Lodge, Sir Oliver	Lake	1 1 0
London, City of, Electric Lighting Co.		2 2 0
London & Counties Coke Assoc.		1 1 0
London Electric Supply Association ...		10 10 0
London Power Company		1 1 0
Longden, H.	Carshalton	10 6
Longley, J. A.	London	1 1 0
Lowestoft Water & Gas Company		2 2 0
Low Temperature Carbonisation Ltd.		10 10 0
Luton Gas Company		2 2 0

Name	Town	Amount
MacWilliam, Dr. Henry	Liverpool	10 0
Maidstone Gas Company (1934)		1 1 0
Maidstone Gas Company		1 1 0
Manchester Corporation		26 5 0
Manchester Corporation Electric. Dept.		2 2 0
Manchester Corporation Gas Dept.		5 5 0
Mansfield Corporation (1934)		1 1 0
Mansfield Corporation		1 1 0
Mahetr, Captain L. E.	Newton Heath.....	1 1 0
Melland, Alderman Will	Manchester	5 0 0
Melland, Brian	Manchester	10 0
Mid-Kent Gaslight & Coke Company ...		1 1 0
Mirfield U.D.C.		1 1 0
Mirfield Gas Company		1 1 0
Montrose, the Duke of	Glasgow	10 6
Moore, S. H.	Chester	10 6
Morgan, D. and Sons	Cardiff	1 1 0
Newcastle-upon-Tyne Corporation		5 5 0
Newcastle & Dist. Healthy Life Society		1 1 0
Newcastle & Gateshead Gas Company...		1 1 0
Newton, Lord	London	1 1 0
Nicholas, P. B.	Wath-upon-Dearne	10 6
Nicholson, P. B. (1936).....	Wath-upon-Dearne	10 6
North Middlesex Gas Company.....		2 2 0
Nottingham Corporation		5 5 0
Oldham Corporation		5 5 0
Oldham Corporation Gas Department...		2 2 0
Oldham Society, Beautiful		1 1 0
Osborne, Dr. H.	Salford	1 1 0
Oxford and District Gas Company		1 1 0
Parish, C. W.	London	2 2 0
Parkinson Stove Company	Birmingham	2 2 0
Payne, Mrs.	London	1 0 0
Pearson, Dr. S. Vere	Mundesley	10 0
Pilcher, G. T. (1934)	Godalming	1 1 0
Pilcher, G. T.	Godalming	1 1 0
Pontefract Brothers	Manchester	1 1 0
Poplar Corporation		1 1 0
Portsmouth Gas Company		1 1 0
Powell, Major General S. H.	London	1 0 0
Power Gas Corporation	Stockton-on-Tees...	1 1 0
Preston Corporation		1 1 0
Preston Gas Company		1 1 0
Preston, J. Roger	London	10 6
"Prior" Oil Burners Ltd.	London	1 1 0
Radcliffe Corporation		1 1 0
Radiation Ltd.	London	5 5 0
Redditch Gas Company		1 1 0
Refuge Assurance Company	Manchester	5 5 0
Rhondda, Viscountess	London	10 6
Richmond (Surrey) Corporation		1 1 0
Ripon Corporation Gas Department.....		1 0 0
Robertson, R.	Bristol	10 6
Robinson, Mrs. S.	Hale	10 0

Town	Amount	Name			
Rochdale Corporation	3	3	0		
Royton U.D.C.	1	1	0		
Russell, Miss Diana	London	10	0		
St. Helens Corporation	1	1	0		
Salford Corporation	1	1	0		
Salford Corporation Gas Department ...	2	2	0		
Sanger, Mrs.	London	1	0	0	
Sanitary Inspectors' Association	London	1	1	0	
Scarborough Gas Company		1	1	0	
Scottish Branch N.S.A.S.	Glasgow	2	2	0	
Seale, Mrs. I. L.	Prestatyn	10	6		
Shaw, Mrs. Bernard	London	3	3	0	
Shaw, Mrs. James	Alderley	10	6		
Shaw, Sir Napier	London	2	2	0	
Sheffield Gas Company		1	1	0	
Sheffield, Rotherham & District Smoke Abatement Committee	Sheffield	25	0	0	
Shrewsbury Gaslight Company		1	1	0	
Siedler, Dr. Ph.	Frankfurt A.M. ...	15	0		
Simon, Sir Ernest	Manchester	2	2	0	
Sisson, L. B. (1934)	Pittsburgh	10	6		
Sisson, L. B.	Pittsburgh	10	6		
Smethwick Corporation		2	2	0	
Smith and Wellstood, Ltd.	London	1	1	0	
Smoke Prevention Ltd.	London	1	1	0	
Société pour les Développement des Véhicules Electriques	Paris	1	1	0	
Solihull Gas Company		1	1	0	
Southampton Gaslight & Coke Company		1	1	0	
Southgate and District Gas Company ...		2	2	0	
Southern, G. W.	Sheffield	10	6		
South Metropolitan Gas Company	London	26	5	0	
South Shields Gas Company		1	1	0	
South Suburban Gas Company (1934) ...		5	5	0	
South Suburban Gas Company (1935) ...		5	5	0	
Southwark Corporation		1	1	0	
Spenborough Gas Department		2	2	0	
• Spenborough Gas Department		2	2	0	
Stalybridge Corporation		1	1	0	
Stepney Corporation		1	1	0	
Stockport Corporation Gas Department		2	2	0	
Stoke-on-Trent Corporation		5	5	0	
Stourbridge Gas Department		1	1	0	
Stretford Corporation		2	2	0	
Stretford and District Gas Board		1	1	0	
Sunderland Corporation		5	5	0	
Sunderland Gas Company		1	1	0	
Sunlight League of New Zealand	Christchurch	10	6		
Swindon United Gas Company		1	1	0	
Tanner, A. E.	Manchester	2	2	0	
Taylor, H. Frankland	Disley	10	6		
Thomas, J. W.	Manchester	10	6		
Thompson, Dr. M. B.	Rotherham	1	1	0	
Tipton Gas Department		1	1	0	
Tootal Broadhurst Lee & Co.	Manchester	3	3	0	

Name	Town	Amount
Tottenham Corporation		1 1 0
Tottenham and District Gas Company...		5 5 0
Trezise, W. E.	Wolverhampton ...	1 1 0
Trier, J. Newton	London	1 1 0
Troup, Lady	London	10 0
Turbine Furnace Co. Ltd.	London	1 1 0
Uxbridge, Maidenhead, Wycombe and District Gas Company		1 1 0
Voeux, Dr. H. A. Des	Lymington	2 2 0
Wakefield Corporation (1934)		1 1 0
Wakefield Corporation		1 1 0
Wakefield Gaslight Company		1 1 0
Wallasey Corporation (1934)		5 5 0
Wallasey Corporation		5 5 0
Walsall Corporation		1 1 0
Wandsworth and District Gas Company		5 5 0
Warner, A.	London	1 1 0
Warrington Corporation		2 2 0
Waterhouse, Mrs. T. C.	Bakewell	2 0 0
Waterhouse, Mrs. T. C. (1936)	Bakewell	2 0 0
Westminster Corporation		1 1 0
Weston-super-Mare & District Gas Co.		1 1 0
West's Gas Improvement Ltd. (1934) ...	Manchester	5 5 0
West's Gas Improvement Ltd.	Manchester	5 5 0
Whipple, Dr. F. J. W.	London	1 0 0
Whitehead, A.	London	1 1 0
Widnes Corporation		1 1 0
Wigglesworth, Miss E.	Rawtenstall	10 0
Willey and Co. Ltd.	Leicester	2 2 0
Winchester Gas & Water Company		1 1 0
Wolverhampton Corporation		1 1 0
Wolverhampton Gas Company		2 2 0
Woodall Duckham Co. Ltd.	London	5 5 0
Wrexham Corporation		1 1 0
Yeadon & Guisley Gas Company		1 10 0
Young, Mrs.	Withington	10 0
York Gas Company		10 0 0
Subscriptions and Donations under 10/-		13 9 1

Total £910 18 1

THE NATIONAL YOUNG ADULT LITERARY SOCIETY

Balance Sheet, June 30th, 1935.

ABBOTT & SON, Chartered Accountants,
40, South King Street,
Manchester, 2.

August 20th, 1935.

MEMBERSHIP FORMS.

INDIVIDUAL.

*To the General Secretary, National Smoke Abatement Society,
36 King Street, Manchester, 2.*

Kindly admit the undersigned as a Member/an Associate of
the Society. A first Annual Subscription is enclosed, to date
from 193

Signed

Address in full

Minimum Subscription for members
(including Journal) 10/6.
Associate Subscription 5/-.
Life Membership Subscription £25.

COMMERCIAL FIRMS AND AFFILIATED MEMBERS.

(See Constitution, Sections 3 and 4).

*To the General Secretary, National Smoke Abatement Society,
36 King Street, Manchester, 2.*

Kindly admit the undersigned as a member of the Society.
A first Annual Subscription of £ : : is enclosed,
to date from 193

Signed

On behalf of

Address

Representative(s) appointed

Address Communications to { Firm
Representative.

Minimum Subscription, One Guinea.

DONATION FORM.

*To the General Secretary, National Smoke Abatement Society,
36 King Street, Manchester, 2.*

I enclose £..... as a donation to the Society, and
would be pleased to receive notices, literature, etc., from time
to time. (Delete latter clause if desired).

Signed

Address

.....

.....

To be forwarded to the Society.

BANK ORDER FORM.

To the Manager,

The Bank.

Please pay the sum of £ : : immediately
and on the same date in each succeeding year until further notice,
to the credit of the NATIONAL SMOKE ABATEMENT SOCIETY, with
the District Bank Ltd., 55, King Street, Manchester.

Signed

Address

.....

.....

Date 193

FORM OF BEQUEST.

“I give free of duty to the National Smoke Abatement Society
of 36, King Street, Manchester, the sum of £.....to be
applied to the general purposes of the said Society, and I declare
that the receipt of the Treasurer for the time being shall be a
sufficient discharge to my Executors for the same.”

A WILL TO ABATE SMOKE

is present with a large, and growing number of people. It is, however, not yet capable of full achievement, and further hard work, education, and propaganda needs to be done. The present limited resources of the Society permit only a fraction of the work that is possible. Your help in obtaining more subscriptions is therefore respectfully solicited. In particular we would stress the value of the Legacy, by means of which great reforms such as this are assured of final success. May we suggest that yours, at least to some extent is

A WILL TO ABATE SMOKE

January. 1937.
C 32

1,233 -

25-3-5
(including profit)

The National Smoke Abatement Society



SEVENTH
ANNUAL
REPORT
1936-7



A Section of the Smoke Abatement Exhibition at the Science Museum, South Kensington, October 1936.

SEVENTH ANNUAL REPORT

of the

National Smoke Abatement Society

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1936

36 KING STREET
MANCHESTER, 2.

National Smoke Abatement Society

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Charles Gandy.	Dr. E. H. Walker, M.B., Ch.B., D.P.H.
A. L. Holton.	

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Coke Oven Managers' Association —F. White, T. Johnson.	Newcastle and District Healthy Society— A. M. Bristow.
Institute of Fuel— E. W. L. Nicol, Assoc. Inst. C.E., M.Inst. Mar.E., A.M.I.E.E.	Sanitary Inspectors' Association— T. E. Birtwisle, F.S.I.A.
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Heanor.—

Hereford.—

Heston & Isleworth.—

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Lancaster.—Councillor W. M. Simpson, Dr. J. D. Buchanan, M.B., D.P.H.

Leeds.—Dr. J. Johnstone Jarvis, M.D., D.P.H. (Executive), J. V. Gray.

Leicester.—Councillor C. E. Keene (Executive).

Leyton.—Alderman J. B. Shimmin, B.Sc., Councillor E. A. Rigg.

Lincoln.—Dr. Mohan Lal Bery, M.B., Ch.B., D.P.H., D. G. McGill, M.S.I.A.

Liverpool.—Alderman W. Muirhead (Executive), Dr. W. M. Frazer, M.D., M.Sc., D.P.H. (Executive).

Maldens & Coombe.—H. Tunbridge, M.R.San.I., Alderman E. E. W. Manning.

Manchester.—Alderman W. T. Jackson, Alderman James.

Mansfield.—

Middleton.—Councillor Wolstencroft, Dr. S. T. Beggs, M.D., M.B., B.S., B.A.O., D.P.H.

Mirfield.—Councillor A. Kilner, Councillor Hallas Lockwood.

Mitcham.—Councillor W. G. F. Searl, Councillor W. S. Lawrence.

Newcastle-under-Lyme. — C. A. Wood, M.S.I.A., M.R.San.I.

Newcastle-upon-Tyne.—Councillor W. Thompson, Alderman David Adams, J.P., M.P. (Executive).

Nottingham.—Dr. Cyril Banks, M.D., Alfred Wade.

Oldham.—Alderman T. Wrigley, J.P., Dr. J. T. C. Keddie.

Poplar.—Councillor J. A. Ashley, Councillor H. Boulton.

Preston.—Alderman R. Durham.

Pudsey.—Alderman S. Myers, Councillor J. T. Pickard.

Radcliffe.—

- Richmond (Surrey).**—Dr. C. S. Brebner, M.D., D.S.O., George Laws.
- Rochdale.**—Dr. J. Innes, M.D., D.P.H., Chairman of Sanitary Sub-Committee.
- Rowley Regis.**—Alderman C. C. Lewis, Dr. F. Asker.
- Royton.**—Councillor T. H. Lowe, Ellis Harrison.
- Salford.**—
- Scarborough.**—Alderman Bielby, Dr. S. Fox Linton.
- Sheffield, Rotherham and District Smoke Abatement Committee.**—Councillor W. Asbury, J.P. (Executive), James Law.
- Shipley.**—
- Smethwick.**—Councillor T. C. McKenzie, M.B., Councillor F. W. Perry.
- Southall-Norwood.**—Dr. E. H. R. Smithard, M.D., D.P.H., I. A. Stephenson.
- Southampton.**—
- Southend-on-Sea.**—Chairman of the Sanitary Committee.
- Southwark.**—Councillor A. J. Marshall, J.P., Dr. W. Stott, M.B., B.S., D.P.H.
- Stalybridge.**—Alderman Potts, Councillor G. Leigh.
- Stepney.**—
- St. Helens.**—Alderman T. Hamblett, J.P., Dr. F. Hauxwell, M.B., Ch.B., D.P.H.
- Stoke-on-Trent.**—
- Stretford.**—Councillor H. Lord, Dr. E. H. Walker, M.B., Ch.B., D.P.H. (Executive).
- Sunderland.**—Dr. A. S. Hebblethwaite, Councillor J. L. Precht.
- Swinton & Pendlebury.**—Alderman J. Bradley, J.P., Dr. G. Hamilton Hogben.
- Tottenham.**—Chairman of Health Committee, Medical Officer of Health.
- Uxbridge.**—Councillor T. R. Thirtle.
- Wakefield.**—Alderman S. Butterworth.
- Wallasey.**—Dr. R. B. Berry, Alderman D. P. Charlesworth.
- Walsall.**—C. A. Stansbury.
- Walthamstow.**—M. E. Duncan.
- Warrington.**—
- Wednesbury.**—
- Wembley.**—Councillor E. H. Everett, R. M. Turner.
- West Bromwich.**—
- Weston-super-Mare.**—
- Westminster.**—Dr. A. J. Shinnie, M.D., D.P.H., Councillor Mrs. Alderson Horne.
- Widnes.**—Councillor T. Smith, Councillor E. Hesketh.
- Willesden.**—L. H. Dibblin.
- Wolverhampton.**—Dr. R. H. H. Jolly, M.D., D.P.H.
- Wood Green.**—Councillor E. J. Anderson.
- Wrexham.**—

Information Concerning the Society

The National Smoke Abatement Society was formed in 1929 by the amalgamation of the Coal Smoke Abatement Society (1899) and the Smoke Abatement League of Great Britain (1909). It is an organization dependent entirely upon voluntary support, and its objects and the conditions of membership will be found in the constitution, on another page.

Offices.—Central (General Secretary's) Offices : 36, King Street, Manchester, 2. Tel. : BLAckfriars 0896.
London Office : 71, Eccleston Square, S.W.1. Tel. Victoria 9274
Scottish Branch : City Chambers, Glasgow.

Lectures.—The Society will endeavour to supply lecturers on smoke abatement in any part of the country. As a rule, the only charge is for the travelling expenses of the lecturer. The services of the Secretary of the Society are generally available for lectures.

Exhibits.—The Society is prepared to loan smoke abatement exhibits, suitable for use at health and other exhibitions, free of charge ; or to take and equip stands at such exhibitions. A list of exhibits available will be sent on request.

Lantern Slides.—The Society possesses a large number of lantern slides dealing with various aspects of smoke abatement. These will be loaned for the use of lecturers at a charge of one penny per slide, plus postages. A catalogue of the slides will be sent on request.

Posters.—Slogan posters, size 30 in. by 20 in., four kinds, printed black and green, can be purchased at 4d. each. Large pictorial posters, printed three colours, for use on ex-E.M.B. Frames ; 10/- per set (7/6 to Affiliated Authorities).

Shade Cards for Smoke Inspection.—Tinted shade cards, showing different densities of smoke, of which the denser tints have been adopted as nuisances by magistrates hearing coal smoke complaints, are available at a price of 6d. each.

Information and Advice.—The Society is glad, at any time, to be of assistance to any person requiring information on smoke abatement and related matters. Inquiries should be addressed to the General Secretary, at 36, King Street, Manchester 2.

List of Publications

(All prices include postage. Reduced prices for quantities).

NEW PUBLICATIONS.

Proceedings of the Science Museum Conference (1936). The most complete review of the problem to be published for many years. Twelve papers and discussions in full.

Technical: Methods for the Prevention of Grit and Dust Emission, by A. T. Barber and T. F. Hurley (Fuel Research Station); Smoke Prevention in the Iron and Steel Industry, by H. C. Armstrong; Smoke Emission in the Clay Industries, by E. Rowden and A. T. Green (British Refractories Research Association).

General: Solution of the Domestic Problem, by Dr. M. Fishenden; Through a Glass Darkly, by Noel Carrington; Effect of Pollution on Vegetation, by Sir Arthur Hill and Dr. C. R. Metcalfe (Kew Gardens); Developments in the Investigation of Pollution, by Dr. J. S. Owens.

Health: Pollution in Relation to Tuberculosis, by Sir Pen-drill Varrier-Jones; Light and Clean Air in Relation to Surgical Tuberculosis, by Sir Henry Gauvain; Obstruction of Light by Smoke and its Effect on Health, by Sir Leonard Hill.

Administration: Public Health Administration and Smoke Abatement, by Dr. A. S. M. Macgregor (M.O.H., Glasgow); Smoke and the Sanitary Inspector, by H. G. Clinch (C.S.I., West Ham).

112 pages, 4to. Price 2/-. Limited quantity only available.

Handbook and Guide to the Science Museum Exhibition. The Handbook is not only a detailed guide to the Exhibition, but containing a series of twelve authoritative articles on the main aspects of the problem, is a permanent and useful reference book. There is a foreword by the Minister of Health, and in addition there is a series of communications from correspondents abroad on progress being made in other countries.

80 pages. Medium 8vo. Price 6d.

The Case Against Smoke. A new booklet which is intended to give the reader a clear understanding of the nature and extent of the smoke nuisance by means of passages from a number of writers and speakers, each of whom may be regarded as an authority in his own sphere. There are also figures and extracts from official reports and tables. Invaluable for those who write and speak on the subject. 14 pages. 4to. Price 3d.

The Journal of the N.S.A.S. The Journal is not a record of proceedings but a magazine—the only one in the world—devoted to the problems of atmospheric pollution. Contains authoritative articles, notes on technical subjects, news of activities of every kind, and in general keeps the reader up-to-date in every aspect of the subject. Per annum, 2/6. Gratis to members.

The Law Relating to Smoke and Noxious Fumes by the late Randolph A. Glen, M.A., LL.B., Cantab, (Editor of "Glen's Public Health," etc.). With a foreword by Sir Lawrence Chubb. A comprehensive and practical survey of the legislative side of the problem, written by an authority. 8vo. pp. 24. 1/-.

Fumifugium; or the Smoake of London Dissipated, by John Evelyn. This rare and fascinating book, first published in 1661 by command of Charles II., has been republished by the Society with an introduction by Miss Rose Macaulay. In spite of its age this indictment of the smoke evil by the author of the famous Diaries remains true, witty, and penetrating. Illustrated with original wood engravings and a portrait of Evelyn. Paper covers, 6d. Cloth-bound, 1/6.

Smoke and Fumes Nuisances from Road Vehicles. The technical and scientific aspects by Dr. J. S. Owens, A.M.Inst.C.E., M.I.Mech.E., and the legal position by R. P. Mahaffy, M.A. 8vo. pp. 16. 3d.

Smoke and Health by Dr. J. S. Taylor, M.D., D.P.H., Assistant Medical Officer of Health, Manchester. 8vo. pp. 12. 2d.

Smoke and Aviation. Full Report of the 1935 Conference on this subject. Four papers in full and discussions. "Smoke and Visibility" by C. S. Durst, B.A., Assistant Superintendent, Meteorological Office, the Air Ministry. "The Effects of Smoke upon Flying Conditions" by William Courtenay. "The Effects of Smoke upon Flying in the North" by Alan Goodfellow. "Visibility and Smoke in Relation to Aerial Photo-

graphy" by Captain Alfred G. Buckham, F.R.P.S. With photographic illustrations. 8vo. pp. 40. 1/-.

Smokeless Open-Grate Fuels. Report of the Symposium held in 1934. Papers and discussions on all types of solid fuels, their uses and requirements by E. K. Regan, E. W. L. Nicol, Col. W. A. Bristow, H. Cerckel, Mrs. G. H. Miles, Dr. G. E. Foxwell, John Roberts, and Dr. E. W. Smith. 8vo. pp. 60. 1/-,

The State of the Atmosphere. "An Examination into the Effects of Atmospheric Pollution on Building Stones, etc., with a Preliminary Summary of the Conditions Disclosed by various Enquiries into the State of the Atmosphere of Great Britain," by Sir Frank Baines, K.C.V.O., C.B.E., F.R.I.B.A. An invaluable survey of the subject. Royal 8vo. pp. 36. 6d.

Home Fires Without Smoke. Edited by Cyril Elliott and Marion Fitzgerald. 8vo. pp. 59. Cloth-bound remainders, 6d.

The Smokeless Home. A popular 12-page illustrated pamphlet, with cover in colours, describing the ways and means for making the home smokeless. To be sold in quantities for general distribution. Single copies gratis. £5 per 1,000.

"Smoke Abatement and Fuel Economy in Steam Boiler Practice" (Published by the Manchester and District Regional Smoke Abatement Committee). pp. 11. 1d., post 2d.

N.S.A.S. Annual Reports. Gratis, by Post 1d.

PROCEEDINGS OF THE ANNUAL CONFERENCES.

Each with all papers in full, and discussions. 8vo. Price 1/- each.

Newcastle, 1932. Presidential Address and papers on: "The Domestic Smoke Problem: the Possibilities of Coke-Oven Fuel"; "The Psychological Effects of Smoke"; "The Human Element: A Factor in Smoke Abatement."

Sheffield, 1933. Presidential Address and Resolutions, and papers on: "The Five-Years Clause and other Matters arising from the Public Helath (Smoke Abatement) Act, 1926"; "How the Citizen Takes the Air: The Personal Significance of the Smoke Problem"; "The Combating of Domestic Smoke in Industrial Areas."

Glasgow, 1934. Presidential Address and Resolutions, and papers on: "The Measurement of Atmospheric Pollution"; "The Effects of Smoke upon Visibility and Aviation"; "The Effects of a Smoke-Laden Atmosphere on Horticulture"; "Nature in Beautiful"; "Slum Clearance and the Smoke Problem."

Bristol, 1935. Presidential Address on "Barbarism," Resolutions, and Papers on: "The Sources of Atmospheric Pollution"; "Smokeless Equipment in Housing Schemes—Electrical, Gas, and for Solid Fuels"; "Smoke and the Countryside"; and "Dust and Grit Emission from a Sanitary Inspector's Viewpoint."

Science Museum, 1936.—See page 7,

CONSTITUTION OF THE SOCIETY.

1. **NAME.**—The Society shall be called the NATIONAL SMOKE ABATEMENT SOCIETY.

2. **OBJECTS.**—The Society shall be concerned with the prevention of air pollution generally, and in particular, that arising from coal smoke.

The objects of the Society shall be :—

- (a) To create an informed public opinion on the evils of air pollution.
- (b) To inquire into, and if thought advisable, assist investigations directed towards the abolition of smoke, whether industrial or domestic.
- (c) To take steps to popularize the use of smokeless methods of heat and power production.
- (d) To promote and support legislation for preventing the pollution of the atmosphere.

3. **MEMBERSHIP.**—The Society shall consist of :—

- (a) Life Members.
- (b) Members.
- (c) Associates.
- (d) Affiliated Members.

Life Members.—A donation of not less than twenty-five guineas paid in one amount by any individual, shall constitute the donor a member for life.

Members.—An Annual Subscription of not less than half a guinea in the case of an individual, or one guinea in the case of a commercial firm, shall constitute the subscriber a member. A commercial firm registered as a member shall be entitled to nominate a representative to exercise the privileges of membership as regards attendance at meetings, voting, etc.

Associates.—An Annual Subscription of not less than five shillings shall constitute that subscriber an Associate.

Affiliated Members.—The payment of not less than one guinea by any Local Authority, Society or Institution, shall constitute the subscribing body an Affiliated Member. The affiliated Member shall be entitled to appoint two representatives to the Council of the Society, who shall receive the privileges of full membership of the Society.

4. **PRIVILEGES OF MEMBERSHIP.**—The privileges of membership shall include :—

- (a) Advice and assistance in questions relating to smoke abatement and fuel economy as far as the circumstances of the Society will permit.
- (b) Free admission to lectures arranged by the Society.
- (c) The right to receive free of cost, the general publications of the Society as they appear, including the Journal of the Society. Associates shall not, however, receive the Journal and such other literature as may be decided upon from time to time.

5. **THE COUNCIL.**—The Council of the Society shall consist of the Officers, the members of the Executive Committee, two representatives from each Affiliated Member, together with not more than thirty members to be elected annually at the General Meeting.

The business of the Council shall be to direct the policy of the Society in general and to receive any periodical reports from the Executive or other committee.

The Council shall meet at least twice a year, of which at least one meeting shall take place in London.

6. **THE EXECUTIVE COMMITTEE.**—The Executive Committee shall consist of the Officers and not less than twelve members or representatives of Affiliated members, who shall be elected annually at the General Meeting of the Society. The Executive Committee shall have power to appoint sub-committees, and to co-opt additional members. Five shall form a quorum.

The Committee shall meet as required, and the place of meeting shall be at the central offices of the Society, or other place at the discretion of the Committee.

The business of the Committee shall be to manage the affairs of the Society.

7. **OFFICERS.**—The Officers of the Society shall be President, Vice-President and Honorary Treasurer, to be elected annually. The Chairman of the Committee and of the Council, shall also be Officers, but shall be elected by their respective Committees.

8.—**GENERAL MEETING.**—The General Meeting of the Society shall be held annually at which shall be presented the Annual Report and the Audited Financial Statement, and at which the Officers, the Council and the Executive Committee for the following year shall be elected. Other general meetings shall be held on the requisition of the Council or Executive Committee, or of 20 members of the Society. One month's notice shall be given of all General Meetings.

9. ALTERATION TO CONSTITUTION.—No change shall be made in the constitution of the Society, except by a two-thirds majority of the members present and voting at the Annual Meeting or at a Meeting called specially for the purpose. A notice in writing of any resolution to be submitted for this purpose must be sent to all members of the Society at least a fortnight before the Annual or Special General Meeting.

10. ACCOUNTS.—Accounts shall be kept of all moneys received and expended by the Society, and once at least every year the accounts of the Society shall be examined and the correctness thereof certified by a qualified auditor.

11. BRANCHES.—Branches of the Society shall be constituted, as far as possible, in the town or districts of the United Kingdom, to deal with local smoke abatement and air pollution problems. Branches shall settle their own constitution and terms of membership, but shall pay an affiliation fee of at least sixpence for every individual member and of two shillings and sixpence for every firm affiliated to the National Society, except in the case of members who are also members of the National Society. Members of the Branches who are not also members of the National Society shall be entitled to attend the General and other meetings of the Society, but shall not be entitled to vote thereat. The Branch shall, however, appoint two delegates to the Council of the National Society and to the Annual General Meeting, who shall have full voting powers.

12. JOURNAL AND LITERATURE.—A copy of each issue of the Journal of the Society, together with all other current general literature shall be sent free to each member and delegate from each Affiliated member ; to the Town Clerk of each affiliated Local Authority, and to the Secretary of each affiliated Society or Institution.

13. INTERPRETATION OF CONSTITUTION.—The interpretation of these rules together with any question on which the rules are silent shall be decided by the Executive Committee until the next Annual General Meeting.

SEVENTH ANNUAL REPORT

for the Year ended June 30th, 1936

General Review.—The increasing general interest in the state of the atmosphere, noted in the last report, continues to be maintained, and it is now difficult to imagine any return to the apathy that was prevalent up to a few years ago. The question, though, is still a long way from receiving the attention it demands.

In addition to the Society, the Regional Committees and the Committee for the Investigation of Atmospheric Pollution of the Department of Scientific and Industrial Research create, by their activities and reports, considerable public interest. A further feature of note is the greater attention given to the subject generally in the Annual Reports of Medical Officers of Health and Sanitary Inspectors. Such references are usually fully reported and discussed in the local press.

Among the many meetings held during the year on smoke abatement and related subjects may be mentioned the Presidential Address, on 13th. December, 1935, to the Junior Institution of Engineers by Sir Frank E. Smith, Director of the Department of Scientific and Industrial Research, with the title "Coal, Power and Smoke." An important conference of the Faraday Society was held in April, in Leeds on "Disperse Systems in Gases, Dust, Smoke and Fog," at which 33 papers were read. A widely reported paper on the health aspects of the problem was read by Lt. Col. John du F. Langrishe, of the Usher Institute, University of Edinburgh, to a meeting of the Society of Chemical Industry at Edinburgh on October 8th, and Dr. H. A. Des Voeux addressed the Annual Conference of the Association of Technical Institutions at Bath at the end of June.

Bristol Conference.

The seventh Annual Conference of the Society was held at Bristol on September 19th, 20th, and 21st, 1935, by invitation of the Corporation of that city. The papers read, and subsequently published in the *Proceedings* were: "The Sources of Atmospheric Pollution," by Dr. R. Lessing; "Smokeless Equipment in Housing

Schemes," in which the speakers were Geo. S. Francis (Electrical), G. L. Jennings (Gas), and John W. Beaumont (Solid Fuels); "The Smoke Problem and the Countryside, by Dr. A. G. Ruston; and "Dust and Grit Emission from a Sanitary Inspectors' Viewpoint" by L. H. Dibblin.

The Conference opened with an enjoyable Reception by the Lord Mayor and Lady Mayoress of Bristol (Alderman and Mrs. H. J. Maggs) in the Council House. On the afternoon of the Saturday, following the Annual General Meeting, the members of the Conference, through the hospitality of the Bristol Water Company, visited the Cheddar Gorge and were there entertained to tea. The imposing new showrooms of the Bristol Gas Company were visited on the Sunday morning, after which a visit was made to the all-electric house built and equipped by the Electrical Association for Women.

The Conference was attended by 116 members and delegates. Once again the notice given in the Press to the event was most gratifying; a total of 336 cuttings being received. A noteworthy feature of this publicity was that thirty leading articles, favourably commenting upon the Society and its activities, appeared in the daily newspapers at the time.

Conference Resolutions.

The following resolutions were adopted by the Conference at Bristol:

(1) "THAT this Annual General Meeting of the National Smoke Abatement Society congratulates the Manchester City Council upon its action in appointing, and in approving the report and recommendations of, a special sub-committee to consider the desirability and practicability of increasing the use of smokeless fuels (including gas and electricity) and urges all other local authorities to appoint committees of their own councils with similar terms of reference."

(2) "THAT this Conference of the National Smoke Abatement Society is of opinion that the time has now arrived when serious consideration should be given to the desirability of qualified exemption enjoyed by certain industries under the Public Health (Smoke Abatement) Act, 1926, being withdrawn.

We request the Executive Committee to collect and correlate information from local authorities on this subject with the object of making representations to the Government that in the best interests of the community such exemptions should be withdrawn."

The first resolution was sent to the principal local authorities in the country, and is known to have created considerable discussion, although special committees on the same lines were set up immediately by only three authorities, Bury, Newcastle-upon-Tyne, and Edinburgh. In other cases the subject was referred to the attention of appropriate existing committees.

A questionnaire bearing on the second resolution was sent to the Medical Officer of Health of authorities which are concerned with the industries listed in the "exemptions clause." As a result, a useful amount of information was obtained from the 51 replies received, which, on analysis, showed that in many cases the Medical Officer was of the opinion that the clause could be withdrawn, and in the majority of cases, that there were ample reasonable grounds for asking the Minister of Health to review the position. A letter quoting the resolution and embodying the information received was accordingly sent to the Minister with the request that the desirability of withdrawing the exemptions be considered. It is not known what action has followed this request.

Science Museum Exhibition.

A proposal from the Society that a smoke abatement exhibition should be organized and held at the Science Museum, South Kensington, was favourably received by the Director and Council of the Museum, and as a result, arrangements were made to hold the exhibition during the month of October, 1936.

A special exhibition committee, with full powers to act, was set up by the Executive Committee, and this in turn set up two sub-committees, namely a Technical Advisory Committee to be concerned with the arrangements for the exhibition, and an Editorial Committee to prepare the Exhibition Handbook and Catalogue. It was realized that it would neither be possible nor desirable to invite the participation of individual firms, but the co-operation of the following representative Government Departments and representative associations was sought and readily given: the Department of Scientific and Industrial Research, the Fuel Research Board, the British Electrical Development Association, the British Gas Federation, the Coal Utilisation Council, the Low Temperature Coal Distillers' Association of Great Britain, the Monmouthshire and South Wales Coal Owners' Association, the London and Counties Coke Association, the British Oil Burner Manufacturers' Association.

A representative from each of these associations was elected to the Technical Advisory Committee and a gratifying amount of assistance was rendered by other Government departments and other associations and individuals, including the Building Research Board,

the Chemical Research Board, the Meteorological Office of the Air Ministry, the Office of Works, and the Royal Parks. Exhibition material was also promised from the British Leather Manufacturers' Research Association, the Manchester Literary and Philosophical Society, the Manchester Public Health Department, Arthur R. Warnes, Esq., Messrs. Frank Partridge, Dr. R. Lessing, and others.

The exhibition itself does not come into the period covered by this report, but the progress made indicates the probability of a most successful event.

Annual Conference, 1936.

As stated in the last report, an invitation was accepted to hold the 1936 conference in Leeds. The possibility of the exhibition at the Science Museum made it unfortunately necessary to ask the Health Committee of the Leeds City Council, through Dr. J. Johnstone Jervis, if they could see their way to postpone the visit until 1937 in order that the 1936 Conference could be held in London in conjunction with the exhibition. This they kindly agreed to do, and our grateful thanks to them for enabling the present arrangements to be made must be recorded. It is hoped that the stimulus given by the South Kensington events will be reflected in a successful meeting at Leeds in 1937.

Birmingham Council Meeting.

A meeting of the Council of the Society was held on April 2nd, 1936, in the Council House, Birmingham, and was attended by 35 members. After the formal business, a paper was read by Mr. F. Forrest, Chief Engineer and Manager to the City of Birmingham Electricity Committee, describing the electrostatic dust-precipitation plants at the Hams Hall and Nechells Power Stations. In the afternoon, by invitation of the Department, a visit was paid to the stations to inspect the plants. Mr. Forrest's paper is printed in full in the August, 1936, issue of the Journal.

Photographic Competition.

With a view to obtaining photographs suitable for exhibition and reproduction purposes a photographic competition was instituted during the year, the judges being Lady Snowden, James Shaw, Esq., F.R.P.S., and Alderman Will Melland. A satisfactory number of entries of high quality were obtained, and the first prize of £10 was awarded to A. H. Green, Esq., A.R.P.S., for a photograph entitled "A Tilery." This was reproduced on the cover of the January, 1936, issue of the Journal. Six other prizes were also awarded and a number of prints were purchased.

The winning and other entries were exhibited, by permission, in the rooms of the Manchester Amateur Photographic Society during January.

Smokeless Equipment in New Housing Estates.

Following suggestions made at the Bristol Conference, the Executive Committee appointed a special sub-committee to consider available methods for equipping new houses and flats to ensure smokelessness, with a view to preparing a report that would be of value to housing authorities. It was later agreed that it would be of value first to obtain full information of what is already being done by housing authorities, and therefore a questionnaire on the subject was drawn up by the sub-committee and was sent to 311 housing directors of local authorities, and to 286 private housing societies. A good proportion of completed replies have been received and it is hoped to issue a report before the end of the present year.

Manchester Shop Exhibition.

In conjunction with the Manchester, Salford and District Branch of the Society a successful exhibition was held in a shop in Manchester during December, 1935. The shop was lent, free of charge, by the Corporation of Manchester, and the co-operation of the Gas and Electricity Departments was kindly given. The shop was visited by a large number of people, and a far larger number inspected the windows in which exhibits were displayed. It is hoped to organize similar exhibitions in other towns as circumstances permit.

Publications.

The *Journal* continues to be published as before, and the *Proceedings* of the Bristol Conference were published. Two new publications are being prepared for use at the Exhibition, namely, an *Outline Chart of the Effects of Smoke*, and *The Case Against Smoke: The Evidence of Authorities*. The latter, to be sold at threepence, should be of considerable value to all who at any time have to write or speak upon the subject. It consists of extracts, appropriately arranged, from authoritative speakers and official reports, which taken together make a strong statement of the case against the smoke nuisance.

Lectures and Exhibitions.

A number of lectures have been given during the year in various parts of the country. Included in these was the address at Bath by Dr. Des Voeux, mentioned earlier, and an address by the Secretary to the Northumberland and Durham Regional Smoke Abatement Committee. A number of meetings have also been addressed by other members and friends of the Society.

The Society has participated during the year in Health Exhibition at York, Southampton, Rochdale and Edmonton.

The Appeal to Local Authorities.

As mentioned in the last Annual Report, a new appeal was then being made to the principal local authorities not already affiliated to the Society. The appeal has been continued during the present year, and so far has resulted in the affiliation of 42 new authorities, making the total number now affiliated, 105. This is still a relatively small number, but includes nearly all the larger towns and cities and others seriously affected by smoke. It is interesting to note that the combined population of the affiliated authorities is over 13,500,000 or more than one-third the total population of England and Wales.

Obituary.

We regret to record the death of Mr. R. Morton Rowe, for many years a member of the Society's Executive Committee, who was well-known to all who were concerned with smoke abatement. Mr. Rowe's record for practical and valuable work on behalf of the movement will not easily be surpassed. First as Chief Smoke Inspector to the City of Manchester Health Department, and then as a special officer for smoke abatement, he did a great deal of patient and onerous work, much of it pioneer work, on both the administrative and investigation sides, and was an invaluable member both of the Society's committees and the Manchester and District Regional Committee, upon which he continued to sit even after his retirement a few years ago. Mr. Rowe was responsible for the many investigations on the pollution of the atmosphere carried out in the Manchester area, and was also in charge of the well-known measurement of sunlight in Manchester and at Timperley, where he took observations from his home.

Those who remember his kindly and stimulating personality and his ardent enthusiasm for a cause in which he had made himself a leading exponent, will join in our expression of regret and of sympathy to his relatives.

Finance.

Examination of the statement of accounts given at the end of this report will show that the financial position continues to be satisfactory in so far as the present level of income, and therefore of activity, is concerned. During the previous year, it will be noted, expenditure exceeded income, but this year the position has been reversed. This has been effected by a reduction in expenditure rather than by any considerable increase in receipts. During the year, to prevent an overdraft on the current account, it was necessary to transfer £75 from the invested funds, and this sum, it should be noted is included in the amount shown of cash in bank and in hand.

Thus while the Society's position is relatively secure, it remains so only by a limitation of expenditure. Salaries, rent, and other overhead charges, though kept as low as possible, must remain fairly constant, and the lack of higher income directly restricts the amount of propaganda and other useful work that can be undertaken. With double the income, three or four times the amount of work could be undertaken, and because of this we appeal to all members not only to maintain their own contributions, but to help, as far as they can, in securing fresh support.

CHARLES GANDY, *Chairman.*

WILL MELLAND, *Hon. Treasurer.*

ARNOLD MARSH, *General Secretary.*

SUBSCRIPTIONS AND DONATIONS

for the Year ended June 30th, 1936.

Name	Town	Amount
Acton Corporation		1 1 0
Acworth, A. W.	London	10 6
Acworth, Miss E. A.	London	1 1 0
Acworth, W. B.	London	2 2 0
Affleck and Brown, Ltd.	Manchester	2 2 0
Altrincham Gas Company		1 1 0
Anonymous		20 0 0
Arning, A. W.	Wilmslow	1 1 0
Ashton, Miss M.	Didsbury	1 1 0
Ashton Bros. & Co. Ltd.	Manchester	2 2 0
Banbury Gas Company		1 1 0
Barber, Stanley S.	London	10 6
Barker, Sydney.....	Manchester	10 6
Barlow, Miss A. (1935)	Bolton	10 0
Barlow, Miss A.	Bolton	10 0
Barlow, Sir Thomas	London	10 6
Bath Corporation		1 1 0
Bath Gas Company		1 1 0
Batta, Prof. Georges	Liège	10 6
Baxendale & Co. Ltd.	Manchester	2 2 0
Beard, E.....	Didsbury	1 1 0
Beard, J. R.	Purley	1 1 0
Beautiful Oldham Society		1 1 0
Beckenham Corporation		1 1 0
Beckwith, J.	London	1 1 0
Bennett, Dr. James	Warrington	10 6
Bethnal Green Corporation		1 1 0
Bibby, J. & Sons	Liverpool	5 0 0
Bibby, H. P. and Mrs.	Birkenhead	2 0 0
Bingley U.D.C.		1 1 0
Birkenhead Corporation		2 2 0
Birmingham Corporation Gas Dept.....		5 5 0
Blyth Gas Company		1 1 0
Bognor Gas and Electricity Company...		1 1 0
Bolton Corporation		1 1 0
Bootle Corporation		5 5 0
Bournemouth & Dist. Gas Company.....		2 2 0
Bracey, Dr. Horace	Birmingham	10 6
Bradford Corporation Gas Dept.		1 1 0
Bray, George & Co.	Leeds	1 1 0
Briggs, C. H.	London	10 6
Brighouse Corporation Gas Dept.		2 2 0
Brighton Corporation		1 1 0
Brighton, Hove & Worthing Gas Co. ...		3 3 0
Bristol Corporation.....		5 5 0
Bristol Gas Company		5 5 0
British Coal Distillation Ltd.	London	1 1 0
British Commercial Gas Asscn.	London	25 0 0

Name	Town	Amount
British Electrical & Allied Manu. Assoc.	London	5 5 0
British Elect. Development Asso. (1935)	London	50 0 0
British Electrical Development Assoc.	London	100 0 0
British Gas Light Company	London	2 2 0
British Smokeless & Oil Fuels, Ltd. ...	London	2 2 0
Brownlie, David	London	10 6
Buchanan, Dr. J. D.	Lancaster	10 6
Bullwinkle, C.	Harrogate	10 6
Burnley Corporation		2 2 0
Burnley Corporation Gas Dept.		1 1 0
Bury Corporation		2 2 0
Buxton Corporation		1 1 0
Cable Makers' Association	London	10 10 0
Cadbury Bros.	Bournville	2 2 0
Calverley & Horsforth Dist. Gas Co. ...		1 0 0
Camberwell Corporation		1 1 0
Cambridge University & Town Gaslight Company		1 1 0
Capper-Johnson, Dr. L.	London	10 6
Cardiff Corporation.....		1 1 0
Cardiff Gas Light & Coke Coy.....		1 1 0
Carøe, W. D.	London	1 0 0
Carr, J. D.	Manchester	1 0 0
Castleford U.D.C.		1 1 0
Cawthorn, Miss M.	Pirbright	10 6
Charrington's	London	10 6
Cheetham, H. (1935)	Manchester	10 6
Cheetham, H.	Manchester	10 6
Cheltenham Gas Light & Coke Co.		1 1 0
Chester Corporation		1 1 0
Chester United Gas Company		2 2 0
Chorley Corporation		1 1 0
Clarke, D. K.	London	10 6
Claye, Dr. E.	Heaton Norris	10 0
Clayton, R. H.	Didsbury	2 2 0
Clegg, E.....	Bradford	10 6
Clevedon Gas Company		1 1 0
Clinch, H. G.....	Stratford	10 6
Coke Oven Managers' Assocn.		1 1 0
Commercial Gas Company	London	5 5 0
Compton, Mrs. Mary	Morecambe	10 0
Cooper, Miss I.	Bramhall	10 6
Crawfurd, H. E.	London	10 6
Croydon Gas Company.....		5 5 0
D. & I. Smokeless Fuels Ltd.	London	1 1 0
Daniels, S. R.	Oxford	10 6
Darlington Corporation		1 1 0
Dobson, Dr. G. M. B.	Oxford	1 1 0
Doncaster Corporation		1 1 0
Dudley, Brierley Hill & Dist. Gas Co....		1 1 0
Duguid, Mr. and Mrs. S.	Lymm	1 1 0
Ealing Corporation		1 1 0
Eastbourne Gas Company (1935)		2 2 0
* Eastbourne Gas Company		2 2 0

Name	Town	Amount
East Cowes Gas Company (1935).....		1 1 0
East Cowes Gas Company		1 1 0
Edmonton U.D.C.		1 1 0
Elland Gas Company.....		1 1 0
Elsworthy, J. Gordon	London	1 11 6
Evans, Mrs. Richardson	London	1 0 0
Exeter Gaslight & Coke Company		2 2 0
Failsworth U.D.C.		1 1 0
Falk Stadelmann & Co. Ltd.	London	1 1 0
Farnworth U.D.C.		3 3 0
Finsbury Corporation		1 1 0
Fitton, Fred A.	Manchester	10 6
Fletcher, G. H.....	Sheffield	10 6
Flugel, Mrs. M.	London	10 0
Forster, A. Lindsay	Glasgow	1 1 0
Foss, Mrs. Alison	London	10 6
Fox, Frank,	London	10 0
Fry, Miss A. Ruth	Thorpeness	1 0 0
Fry, Miss Agnes	Bridgwater	10 6
Gaddum, H. E.	Bowdon	10 0
Gallenkamp, A. & Co. Ltd.	London	1 1 0
Gandy, Mr. & Mrs. H.	Corbridge	1 1 0
Gandy, Charles	Manchester	5 0 0
Ganter, Douglas	Old Trafford.....	10 6
Gas Chambers & Coke Ovens, Ltd.	London	1 1 0
Gas Light & Coke Company	London	52 10 0
Gateshead Corporation		1 1 0
General Electric Co. Ltd.	London	5 5 0
Gerrard, A. Denis	Manchester	10 6
Gibson, Ralph E.....	Liverpool	10 6
Glasgow Corporation Gas Dept.		2 2 0
Gloucester Gas Light Company		1 1 0
Glover and Main, Ltd.	London	5 5 0
Godalming Gas & Coke Company		1 1 0
Godbert, C. W.	Clayton Bridge ...	1 1 0
Goodeve, C. F.	London	10 6
Gravesend Corporation		1 1 0
Great Grimsby Gas Company		1 1 0
Great Yarmouth Gas Company		2 2 0
Greenwich Corporation		2 2 0
Grimsby Corporation		1 1 0
Guildford Gas Light & Coke Company		2 2 0
Gurney, John	London	1 1 0
Hackney Corporation		1 1 0
Halifax Corporation		2 2 0
Halifax Corporation Gas Dept.		10 10 0
Hammersmith Corporation		1 1 0
Hancock, Arthur	Manchester	10 6
Hardy G. & Co. Ltd.	Manchester	2 2 0
Harrogate Corporation		2 2 0
Hartlepool Gas & Water Co.		1 1 0
Haworth U.D.C. Gas Dept.		1 1 0
Hay, Dr. John	Liverpool	10 6
Hayes & Harlington U.D.C.		1 1 0

Name	Town	Amount
Heanor U.D.C.		1 1 0
Herbert, Mrs. Nellie	Buxton	10 6
Herbert, A. Ltd.	Coventry	1 1 0
Hereford Corporation		1 1 0
Herford, Miss A. C.	Withington	10 0
Herne Bay Gas Company		1 1 0
Hessle Gas Company		1 1 0
Heston & Isleworth Corporation		2 2 0
Heywood Corporation Gas Dept.		1 1 0
Higgs, Mrs. M.	Oldham	10 6
Hirst, S.	Leeds	10 6
Hoare, Alfred	London	10 0
Holborn Corporation		1 1 0
Holmes, W. C. & Co. Ltd.	Huddersfield	5 5 0
Horwich U.D.C.		1 1 0
Hove Corporation		1 1 0
Howden, James & Co. Ltd.	London	1 1 0
Huddersfield Corporation		2 2 0
Hull Corporation		1 1 0
Humphrey, Miss A. M.	Weybridge	12 6
Hunter, T. J. A.	Bridge of Weir ...	10 6
Huntley, C. Gordon	Manchester	10 6
Hyde, Mrs. A.	London	1 1 0
Ideal Boilers & Radiators Ltd.	London	5 5 0
Illingworth, S. E.	Weeton	1 0 0
Illingworth Carbonization Ltd.	Bradford	1 1 0
Institution of Gas Engineers	London	10 10 0
Institut'n of Heating & Ventilating Eng.	London	3 3 0
International Combustion Ltd.	London	1 1 0
Ipswich Gas Light Company		1 1 0
Irlam U.D.C.		1 1 0
Jast, Mrs. M.	Bath	11 6
Jennison, Mrs. W.	Eastbourne	1 1 0
Keeley, Robert (1935)	Prestwich	10 0
Keeley, Robert.	Prestwich	10 0
Keighley Corporation		1 1 0
Kerfoot, Thomas	Ashton-under-Lyne	3 3 0
Kershaw, J.B. C.	Cheltenham	10 6
Kidderminster Corporation		10 6
Kildwick Parish Gas Co.		1 1 0
Lacey, Stephen.	London	2 2 0
Lamb, Mrs. H. C.	Heaton Mersey ...	1 1 0
Lambeth Corporation		1 1 0
Lancaster Corporation		2 2 0
Langford, A. S.	Heaton Moor	10 6
Lapage, Dr. C. P.	Manchester	10 6
Lea Bridge Dist. Gas Company		3 3 0
Lea Recorder Co. Ltd.	Manchester	2 2 0
Lee, Miss Dora C.	Oxford	2 2 0
Lee, Sir Kenneth	Manchester	1 1 0
Lees, Miss Marjory	Oldham	1 1 0
Leeds Corporation (1935)		10 10 0
Leeds Corporation		10 10 0
Leeds Corporation Gas Dept.		10 10 0

Name	Town	Amount
Leicester Corporation		10 10 0
Leicester Gas Department		1 1 0
Lessing, Dr. R.	London	1 1 0
Leyton Corporation		1 1 0
Lincoln Corporation		2 2 0
Liptak Furnace Arches Ltd.	London	1 1 0
Liverpool Gas Company		10 10 0
Lockerby, R. B.	Manchester	10 6
London & Counties Coke Assocn.	London	1 1 0
London Electricity Supply Assoc.	London	10 10 0
London Power Company.....		1 1 0
London, City of, Electric Lighting Co.		2 2 0
Longden, H.	Bexhill	10 6
Longley, J. A.	London	1 1 0
Lowestoft Water & Gas Company		2 2 0
Low Temperature Carbonisation Ltd....	London	10 10 0
Luton Gas Company		2 2 0
MacWilliam, Dr. H.	Liverpool	10 6
Maidstone Gas Company		1 1 0
Manchester Corporation		26 5 0
Manchester Corporation Gas Dept.		5 5 0
Manchester Corporat'n Electricity Dept.		2 2 0
Mansfield Corporation		1 1 0
Mather, Capt. L. E.	Newton Heath.....	1 0 0
Meadowcroft, S.	Bradford	10 6
Melland, Alderman Will	Manchester	5 5 0
Melland, Mrs. Will (1935)	Manchester	1 1 0
Melland, Mrs. Will	Manchester	1 1 0
Melland, B. M.....	Manchester	10 0
Meller, Dr. H. B.	Pittsburgh	10 6
Middleton Corporation		1 1 0
Mid-Kent Gaslight & Coke Company ...		1 1 0
Mirfield U.D.C.		1 1 0
Mirfield Gas Company		1 1 0
Mitcham Corporation		3 3 0
Moore, S. H.	Chester	10 6
Morgan, D. & Sons	Cardiff	1 1 0
Newcastle-u-Lyme Corporation (1935)...		1 1 0
Newcastle-under-Lyme Corporation.....		1 1 0
Newcastle-upon-Tyne Corporation		5 5 0
Newcastle-upon-Tyne & Gateshead Gas Company		1 1 0
Newton, Lord	London	1 1 0
Nicholson, P. B.	Wath-upon-Dearne...	10 6
North Middlesex Gas Company		2 2 0
Nottingham Corporation		5 5 0
Oldham Corporation		5 5 0
Oldham Corporation Gas Dept.		2 2 0
Oxford & Dist. Gas Company		1 1 0
Palmers Travelling Cradle & Scaffolding Co. Ltd.	Manchester	1 1 0
Parkinson Stove Co. Ltd.	London	2 2 0
Peake, H. (1935)	Tuxford	10 6
Peake, H.	Tuxford	10 6

Name	Town	Amount
Pearson, Dr. S. Vere	Mundesley	10 0
Pontefract Brothers	Manchester	1 1 0
Poplar Corporation		1 1 0
Portsmouth & Gosport Gas Company...		1 1 0
Powell, Maj. Gen. S. H.	Walmer	1 0 0
Power Gas Corporation Ltd.	Stockton-on-Tees	1 1 0
Preston Corporation (1935)		1 1 0
Preston Corporation		1 1 0
Preston Gas Company		1 1 0
Preston, J. Roger	London	10 6
Prior Oil Burners Ltd. (1935)	London	1 1 0
Prior Oil Burners Ltd.....	London	1 1 0
Radcliffe Corporation		1 1 0
Radiation Ltd.	London	5 5 0
Rathbone, P. R.	Wimbledon	10 6
Redditch Gas Company		1 1 0
Refuge Assurance Co.	Manchester	5 5 0
Rhondda, Lady	London	10 6
Richmond Corporation		1 1 0
Rochdale Corporation		3 3 0
Rowley Regis Corporation		2 2 0
Royton U.D.C.		1 1 0
Russell, Miss Diana	London	10 0
Salford Corporation		1 1 0
Salford Corporation Gas Dept.		2 2 0
Salisbury-Jones, F. W.	London	2 2 0
Sanger, Mrs. A. D.	Chelsea	1 0 0
Sanitary Inspectors' Association	London	1 1 0
Scarborough Corporation.....		1 1 0
Scarborough Gas Company		1 1 0
Scottish Branch N.S.A.S.	Glasgow	3 3 0
Seale, Mrs. I. L.	Prestatyn	10 6
Shaw, Mrs. G. Bernard	London	3 3 0
Shaw, Mrs. James	Alderley Edge	10 6
Sheffield Gas Company		1 1 0
Sheffield, Rotherham & Dist. Smoke Abatement Committee		25 0 0
Shipley U.D.C.		1 1 0
Shrewsbury Gas Light Company		1 1 0
Siedler, Dr. P.	Frankfurt A.M. ...	15 0
Simon, Sir Ernest	Cheadle Heath.....	2 2 0
Smalley, A. Ashton	Bowdon	1 0 0
Smethwick Corporation		2 2 0
Smethwick Corporation		1 1 0
Smith & Wellstood Ltd.	London	1 1 0
Smoke Prevention Ltd.	London	1 1 0
Solihull Gas Company		1 1 0
Southall-Norwood U.D.C.		1 1 0
Southampton Corporation		1 1 0
Southampton Gaslight & Coke Coy.....		1 1 0
Southend-on-Sea Corporation (1935).....		1 1 0
Southend-on-Sea Corporation		1 1 0
Southern, G. W.	Sheffield	10 6
Southgate & Dist. Gas Co.		2 2 0

Name	Town	Amount
South Metropolitan Gas Co.		10 10 0
South Shields Gas Co.		1 1 0
South Suburban Gas Co.		5 5 0
Southwark Corporation.....		1 1 0
St. Helens Corporation		1 1 0
Stalybridge Corporation		1 1 0
Stepney Corporation		1 1 0
Stockport Gas Committee		2 2 0
Stoke on Trent Corporation		5 5 0
Stoke on Trent Corporation Gas Dept....		1 1 0
Stourbridge Corporation Gas Dept.		1 1 0
Stretford Corporation.....		2 2 0
Stretford & Dist. Gas Board		1 1 0
Sunderland Corporation.....		5 5 0
Sunderland Gas Company		1 1 0
Sunlight League of New Zealand		10 6
Swindon United Gas Company		1 1 0
Tanner, A. E.	Manchester	2 2 0
Taylor, H. F.....	Disley	10 6
Thompson, Dr. M. B.	Rotherham	10 6
Thwaites, Lt.-Col. N. G.	London	10 6
Tootal Broadhurst Lee Co. Ltd.	Manchester	3 3 0
Tottenham Corporation		1 1 0
Tottenham & Dist. Gas Co.		5 5 0
Trezise, W. E.	Wolverhampton ...	1 1 0
Troup, Lady Winifred	Kensington	10 0
Turbine Furnace Co. Ltd.	London	1 1 0
Uxbridge, Maidenhead, Wycombe & Dist. Gas Co. (1935)		1 1 0
Uxbridge, Maidenhead, Wycombe & Dist. Gas Co.		1 1 0
Voeux, Dr. H. A.....	Lymington	2 2 0
Wakefield Corporation		1 1 0
Wakefield Gaslight Co.		1 1 0
Wallasey Corporation		5 5 0
Walsall Corporation		1 1 0
Wandsworth & Dist. Gas Co.		5 5 0
Warner, Alfred	Wimbledon	1 1 0
Warrington Corporation		2 2 0
Waterhouse, Mrs. T. C.	Bakewell	2 0 0
Westminster Corporation.....		1 1 0
Weston-super-Mare Gas Co.		1 1 0
West's Gas Improvement Co. Ltd.	Manchester	5 5 0
Whipple, Dr. F. J. W.	London	1 1 0
White, Mrs. C. Prosser.....	Ainsdale	2 2 0
Widnes Corporation		1 1 0
Wigglesworth, Miss E.	Rawtenstall	10 0
Willesden Corporation (1935)		1 1 0
Willesden Corporation		1 1 0
Willey and Co. Ltd.	Exeter	2 2 0
Williamson, D. B.	London	10 0
Winchester Gas & Water Company.....		1 1 0
Wolverhampton Corporat'n Elect. Dept.		1 1 0
Wolverhampton Gas Co.		2 2 0

Name	Town	Amount
Woodall-Duckham Companies Ltd	London	5 5 0
Wood Green Corporation.....		1 1 0
Wrexham Corporation		1 1 0
Yeadon & Guisley Gas Co.		1 10 0
York Gas Company		10 0 0
Subscriptions and Donations under 10/-		10 2 0

Total...	<u>£956 2 0</u>
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THE NATIONAL SMOKE ABATEMENT SOCIETY.

Income and Expenditure Account, for the Year ended June 30th, 1936.

1935			INCOME.			EXPENDITURE.				
£	s.	d.		£	s.	d.		£	s.	d.
910	18	1	Subscriptions and Donations	956	2	0	Salaries.....	445	7	0
90	0	0	Sale of Posters	88	0	0	Rent, Rates, Gas, Water, and Electricity	127	18	0
95	2	11	Sale of Literature	41	4	2	Printing of Posters	252	16	8
77	13	9	Conference Fees	61	19	0	Printing, Stationery & Advertising	53	1	8
9	14	6	Repayment of Income Tax	6	15	6	Travelling Expenses	35	3	6
			Dividends from Investments:				Photographic Competition, Awards and Purchases	157	12	1
7	18	6	Comm. Union Assr. Co. Ltd. ...	7	16	10	General Expenses, Postages, Telephone	109	6	1
9	14	0	London Midland & Scottish Rly.	9	14	0	Furniture and Fittings			
7	9	8	Interest: M. & S. Savings Bank...	7	1	6	Surplus of Income over Expenditure			
10	6		Sundry Receipts	2	12	0				
1209	1	11								
191	19	6½	Excess of Expenditure over Income							
£1401	1	5½		£1181	5	0		£1181	5	0

Balance Sheet, June 30th, 1936.

SURPLUS.			Investments—		
£	s.	d.	£	s.	d.
Balance as at June 30th, 1935	870	12	Commercial Union Ass'nce Co. Ltd.	205	11
Add Surplus of Income over Expenditure	109	6	£25 Stock at Cost	0	
			London Midland & Scottish Rly. Co.	279	5
			£313 4% Debenture Stock at cost	198	0
			Manchester & Salford Savings Bank Deposit	11	
			Cash in Bank and in Hand, June 30th, 1936	682	17
				297	0
				£979	18

MEMBERSHIP FORMS.

INDIVIDUAL.

*To the General Secretary, National Smoke Abatement Society,
36 King Street, Manchester, 2.*

Kindly admit the undersigned as a Member/an Associate of
the Society. A first Annual Subscription is enclosed, to date
from 193.....

Signed

Address in full.....
.....
.....

Minimum Subscription for members
(including Journal) 10/6.
Associate Subscription 5/-.
Life Membership Subscription £25.

COMMERCIAL FIRMS AND AFFILIATED MEMBERS.

(See Constitution, Sections 3 and 4).

*To the General Secretary, National Smoke Abatement Society,
36 King Street, Manchester, 2.*

Kindly admit the undersigned as a member of the Society.
A first Annual Subscription of £ : : is enclosed,
to date from 193.....

Signed

On behalf of

Address

Representative(s) appointed

Address Communications to { Firm
Representative.

Minimum Subscription, One Guinea.

DONATION FORM.

*To the General Secretary, National Smoke Abatement Society,
36 King Street, Manchester, 2.*

I enclose £..... as a donation to the Society, and
would be pleased to receive notices, literature, etc., from time
to time. (Delete latter clause if desired).

Signed

Address

.....
.....

To be forwarded to the Society.

BANK ORDER FORM.

To the Manager,

The Bank.

Please pay the sum of £ : : immediately
and on the same date in each succeeding year until further notice,
to the credit of the NATIONAL SMOKE ABATEMENT SOCIETY, with
the District Bank Ltd., 55, King Street, Manchester.

Signed

Address

.....
.....

Date.....193.....

FORM OF BEQUEST.

“I give free of duty to the National Smoke Abatement Society
of 36, King Street, Manchester, the sum of £.....to be
applied to the general purposes of the said Society, and I declare
that the receipt of the Treasurer for the time being shall be a
sufficient discharge to my Executors for the same.”

LET

SMOKE

DISAPPEAR

is, as we are unfortunately not magicians, only a pious and entirely useless exhortation. Smoke will not disappear unless we continue our work of creating that public opinion and demand out of which alone can come the desired results. To do this work of education and enlightenment effectively requires L. S. D.; to do it as intensely as we could, and to make use of the many opportunities we are now forced to forego, requires much more L. S. D. than we have at present. Thus we have to stress once more the need for further

LEGACIES

SUBSCRIPTIONS

DONATIONS

The National Smoke Abatement Society



**EIGHTH
ANNUAL
REPORT
1937-8**

EIGHTH ANNUAL REPORT

of the

National Smoke Abatement Society

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1937

CHANDOS HOUSE
BUCKINGHAM GATE
WESTMINSTER, S.W.1.

National Smoke Abatement Society

President : H. A. DES VOEUX, M.D.

Chairman : CHARLES GANDY.

Hon. Treasurer : WILL MELLAND, M.A., J.P.

Hon. Advisory Secretary Sir LAWRENCE CHUBB.

General Secretary and Editor: ARNOLD MARSH, M.Sc.Tech., F.I.P.S., M.Inst.F.

Vice-Presidents :

H.R.H. the Princess Louise, Duchess of Argyll.	Sir Leonard Hill, M.B., F.R.S., LL.D., Hon. A.R.I.B.A.
The Rt. Hon. the Earl of Stamford.	Sir Pendrill Varrier-Jones, M.A. (Cantab.), F.R.C.P.
The Rt. Rev. the Lord Bishop of London, P.C., K.C.V.O., D.D.	Sir Oliver Lodge, F.R.S., D.Sc.
The Rt. Hon. Lord Newton, P.C.	Sir George Newman, G.B.E., K.C.B., M.D., LL.D.
The Very Rev. the Dean of Canterbury.	Sir John Robertson, C.M.G., O.B.E., M.D., B.Sc.
Sir Thomas Barlow, Bart., K.C.V.O., F.R.S.	Sir Napier Shaw, Sc.D., F.R.S.
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Sir Arthur Hill, K.C.M.G., Sc.D., D.Sc., F.R.S.	Ex-Bailie W. Brownhill Smith, M.V.O., O.B.E., D.L.
	Peter Fyfe.

Elected Members of the Council.

Mrs. M. A. Cloudesley Brereton.	Major A. J. Martin, M.Inst.C.E.
W. D. Caroe, F.S.A.	Sir Frederick Menzies, K.B.E., M.D., D.P.H., F.R.C.P. (Edin.).
The Rt. Hon. the Viscount Doneraile.	Dr. H. Osborne, M.D., M.R.C.S.
Dr. Margaret Fishenden, D.Sc., F. Inst. P.	Major General S. H. Powell.
A. Lindsay Forster.	Professor C. H. Reilly, O.B.E., M.A., F.R.I.B.A.
Major H. J. Gillespie.	
Sir Francis Goodenough, C.B.E.	

Executive Committee :

Alderman David Adams, J.P., M.P.	Dr. J. Johnstone Jervis, M.D., D.P.H.
Councillor W. Asbury, J.P.	Dr. R. Lessing, Ph.D., F.I.C., M.I.Chem.E., F.Inst.F.
Dr. J. R. Ashworth, D.Sc.	Councillor C. E. Keene.
J. W. Beaumont, M.R.S.I.	A. McCulloch, M.Sc. Tech.
Dr. Matthew Burn.	W. B. McLusky.
F.R.C.P., D.P.H., D.T.M. & H.	Alderman W. Muirhead.
Dr. R. Veitch Clark, M.A., B.Sc., M.B., Ch.B., D.P.H.	E. W. L. Nicol, Assoc.Inst.C.E., M.I.Mar.E., A.M.I.E.E.
R. H. Clayton, B.Sc.	J. A. Robinson, F.S.I.A.
Miss M. Fitzgerald.	Dr. E. W. Smith.
Dr. W. M. Frazer, M.D., M.Sc., D.P.H.	A. E. Tanner.
Charles Gandy.	Miss D. Tripp.
A. L. Holton.	Dr. E. H. Walker, M.B., Ch.B., D.P.H.

Scottish Branch Representatives :—

Ex-Bailie W. Brownhill Smith, M.V.O., D.L. Coun. Alex Munro.
Alexander M. Riddett.

Standing Counsel :

W. R. Hornby Steer M.A., LL.B.

Affiliated Societies and Representatives Appointed to the Council:

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| Beautiful Oldham Society—
A. Arthurs. | Institution of Gas Engineers.—
D. Cleave Cross, E. Crowther. |
| British Medical Association—
Dr. G. Clark Trotter, M. Bishop
Harman, LL.D., F.R.C.S. | Institution of Heating and Ventilating Engineers — C. Ingham
Haden, A. C. Pallot, M.B.E. |
| Coke Oven Managers' Association
—F. White, T. Johnson. | Sanitary Inspectors' Association—
T. E. Birtwisle, F.S.I.A. |
| Institute of Fuel—
E. W. L. Nicol, Assoc. Inst.
C.E., M.Inst. Mar.E., A.M.I.E.E, | Society of Medical Officers of Health— Dr. Cyril Banks, M.D.,
B.S., D.P.H., Dr. J. Johnstone
Jervis, M.D., D.P.H. |
| Institution of Electrical Engineers
—H. C. Lamb, C. D. Taite. | |

Affiliated Local Authorities and Representatives Appointed to the Council :

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| Acton.— M. W. Kinch, J. J. Jenkins. | Cardiff.— Councillor J. Griffiths,
J.P., Dr. J. Greenwood Wilson,
M.D., M.R.C.P., D.P.H. |
| Adwick-le-Street.— | |
| Bath.— | Castleford.— Councillor A. Pickers-
gill. |
| Batley.— | Chester.— |
| Beckenham.— Councillor Rev. R.
Burges, Councillor Mrs. E. M.
G. Barlas. | Chingford.— Chairman of Public
Health Committee. |
| Bethnal Green.— | Chorley.— Alderman Arnold Gillett,
Councillor T. Hamer. |
| Bingley.— W. E. Cooke. | Darlington.— Alderman A. J. Best,
Councillor P. Harrison. |
| Birkenhead.— | Deptford.— Dr. F. L. Keith, Chair-
man of Health Committee. |
| Birmingham.— Councillor Brosch,
Dr. Matthew Burn (Executive). | Doncaster.— Councillor T. Gilber-
thorpe, Dr. R. Watson, M.A.,
M.B., B.Ch., D.P.H., |
| Bolton.— | Durham.— |
| Bootle.— Councillor Dr. I. Harris,
Dr. F. T. H. Wood, O.B.E. | Ealing.— Dr. Thomas Orr, M.D.,
D.Sc. |
| Brighouse.— Alderman B. Asquith,
Mr. C. R. Moss. | Easington.— J. Foster, J.P., J. J.
Waring, Clerk of the Council. |
| Brighton.— Alderman H. M. Black,
J.P., Chairman of Health Com-
mittee. | Edmonton.— Councillor J. Reid,
Councillor J. A. Ward. |
| Bristol.— Alderman J. J. Milton,
J. A. Robinson, F.S.I.A. (Ex-
ecutive). | Failsworth.— Councillor H. Cross-
ley, Councillor P. Riley. |
| Burnley.— Councillor Sampson, J.P.,
Alderman Lynch. | Farnworth.— Councillor Heathcote,
Councillor McManus. |
| Bury.— Councillor Hartley. | Felling.— |
| Buxton.— W. O. Coates. | |
| Camberwell.— Alderman A. F.
Crossman, Alderman G. E.
Deighton. | |

- Finsbury.**—Dr. C. L. Katial, Dr. N. D. Dunscombe.
- Fulham.**—
- Gateshead.**—
- Gloucester.**—Dr. Charles Cookson, M.D., D.P.H.
- Gravesend.**—Alderman Axcell, Councillor McKenzie, J.P.
- Greenwich.**—Councillor R. G. Jaggers, Councillor Mrs. Ada Kennedy.
- Grimsby.**—
- Hackney.**—Councillor Mrs. C. Gooch.
- Halifax.**—Dr. C. G. F. Roe, L.R.C.P. & S., L.M., D.P.H., D.P.M., J. W. Beaumont, M.R.S.I. (Executive).
- Hammersmith.**—
- Harrogate.**—Councillor W. F. W. Rhodes.
- Hayes & Harlington.**—Councillor P. G. Soulsby, Councillor A. A. Perry.
- Heanor.**—
- Hereford.**—
- Heston & Isleworth.**—
- Holborn.**—Councillor A. R. Taylor, M.A., Dr. J. A. Struthers.
- Horwich.**—James Seddon, Councillor J. H. Shaw.
- Houghton-le-Spring.**—
- Hove.**—Dr. N. E. Chadwick, Councillor Capt. F. G. J. Didden.
- Huddersfield.**—Councillor F. I. Butterworth, J.P.
- Hull.**—Alderman W. Turner, Councillor Mrs. Sharp.
- Irlam.**—Councillor J. G. Enticott, J.P., L. F. Atherton.
- Keighley.**—
- Kensington.**—
- Kidderminster.**—Councillor J. Andrews.
- Kirkby-in-Ashfield.**—
- Lambeth.**—Alderman W. G. Geary, Dr. A. G. G. Thompson, M.A., M.D., D.P.H.
- Lancaster.**—Councillor W. M. Simpson, Dr. J. D. Buchanan, M.B., D.P.H.
- Leeds.**—Dr. J. Johnstone Jervis, M.D., D.P.H. (Executive), C. H. Manley, M. A., F.I.C.
- Leicester.**—Councillor C. E. Keene (Executive).
- Leyton.**—Alderman J. B. Shimmin, B.Sc., Councillor E. A. Rigg.
- Lincoln.**—Dr. Mohan Lal Bery, M.B., Ch.B., D.P.H., D. G. McGill, M.S.I.A.
- Liverpool.**—Alderman W. Muirhead (Executive), Dr. W. M. Frazer, M.D., M.Sc., D.P.H. (Executive).
- Luton.**—
- Maldens & Coombe.**—H. Tunbridge, M.R.San.I., Alderman E. E. W. Manning.
- Manchester.**—Alderman W. T. Jackson, Alderman James.
- Mansfield.**—
- Middleton.**—Councillor Wolstencroft. Dr. S. T. Beggs, M.D., M.B., B.S., B.A.O., D.P.H.
- Mirfield.**—Councillor A. Kilner, Councillor Hallas Lockwood.
- Mitcham.**—Councillor A. H. Bailey, Councillor H. Richards.
- Morley.**—
- Newcastle-under-Lyme.**—C. A. Wood, M.S.I.A., M.R.San.I.
- Newcastle-upon-Tyne.**—Councillor W. Thompson, Alderman David Adams, J.P., M.P. (Executive).
- Newton-in-Makerfield.**—
- Nottingham.**—Dr. Cyril Banks, M.D., Alfred Wade.
- Oldham.**—Alderman T. Wrigley, J.P., Dr. J. T. C. Keddie.
- Oxford.**—
- Poplar.**—Alderman J. H. Jones, Councillor H. Boulton.
- Preston.**—Alderman R. Durham.
- Pudsey.**—Alderman S. Myers, Councillor J. T. Pickard.

- Radcliffe.**—
- Richmond (Surrey).**—Dr. C. S. Brebner, M.D., D.S.O., George Laws.
- Rochdale.**—Dr. J. Innes, M.D., D.P.H., Chairman of Sanitary Sub-Committee.
- Rothwell.**—
- Royton.**—Councillor T. H. Lowe, Ellis Harrison.
- Rowley Regis.**—Councillor Dr. T. E. Mitchell, Dr. F. Asker.
- Salford.**—
- Scarborough.**—Alderman Bielby, Dr. S. Fox Linton.
- Sheffield, Rotherham and District Smoke Abatement Committee.**—Councillor W. Asbury, J.P., (Executive), James Law.
- Shipley.**—
- Shoreditch.**—Medical Officer of Health, Chairman of Public Health Committee.
- Smethwick.**—Dr. T. C. McKenzie, M.B., Councillor F. W. Perry.
- Southall.**—Dr. E. H. R. Smithard, M.D., D.P.H., I. A. Stephenson.
- Southampton.**—
- Southend-on-Sea.**—Chairman of the Sanitary Committee.
- Southwark.**—Councillor A. J. Marshall, J.P., Dr. W. Stott, M.B., B.S., D.P.H.
- Spennorth.**—
- Stalybridge.**—Alderman Potts, Councillor G. Leigh.
- Stepney.**—
- St. Helens.**—Alderman T. Hamblett, J.P., Dr. F. Hauxwell, M.B., Ch.B., D.P.H.
- Stoke-on-Trent.**—
- Stretford.**—Councillor H. Lord, Dr. E. H. Walker, M.B., Ch.B., D.P.H. (Executive).
- Sunderland.**—Dr. A. S. Hebblethwaite, Councillor J. L. Precht.
- Swinton & Pendlebury.**—Alderman J. Bradley, J.P., Dr. A. E. Wall.
- Toronto, Canada.**—G. D. Bland, Commissioner of Property.
- Tottenham.**—Medical Officer of Health, Councillor A. R. Turner.
- Urmston.**—
- Uxbridge.**—Councillor T. R. Thirtle.
- Wakefield.**—Councillor S. Butterworth.
- Wallasey.**—Dr. R. B. Berry, Alderman D. P. Charlesworth.
- Walsall.**—C. A. Stansbury.
- Walthamstow.**—M. E. Duncan.
- Wandsworth.**—
- Warrington.**—Alderman P. J. Marron, J.P., Dr. Stuart F. Allison.
- Wednesbury.**—
- Wembley.**—Councillor E. H. Everett, R. M. Turner.
- West Bromwich.**—Councillor J. T. H. Davies, J.P.
- West Ham.**—Councillor Mrs. A. A. Barnes, Mr. H. G. Clinch.
- Weston-super-Mare.**—
- Westminster.**—Dr. A. J. Shinnie, M.D., D.P.H., Councillor Mrs. Alderson Horne.
- Whiston.**—
- Widnes.**—Councillor T. Smith, Councillor E. Hesketh.
- Willesden.**—L. H. Dibblin.
- Wolverhampton.**—Dr. R. H. H. Jolly, MD., D.P.H.
- Wood Green.**—Councillor E. J. Anderson.
- Wrexham.**—Councillor Mrs. C. Jones, Councillor E. S. E. Hackett.

Information Concerning the Society

The National Smoke Abatement Society was formed in 1929 by the amalgamation of the Coal Smoke Abatement Society (1899) and the Smoke Abatement League of Great Britain (1909). It is an organization dependent entirely upon voluntary support, and its objects and the conditions of membership will be found in the constitution, on another page.

Offices.—Central (General Secretary's) Offices : Chandos House, Buckingham Gate, Westminster, S.W.1. Tel : VICToria 7359.
Scottish Branch : City Chambers, Glasgow.
North-Western Branch : 65, Barton Arcade, Deansgate, Manchester, 2.

Lectures.—The Society will endeavour to supply lecturers on smoke abatement in any part of the country. As a rule, the only charge is for the travelling expenses of the lecturer. The services of the Secretary of the Society are generally available for lectures.

Exhibits.—The Society is prepared to loan smoke abatement exhibits, suitable for use at health and other exhibitions, free of charge ; or to take and equip stands at such exhibitions. A list of exhibits available will be sent on request.

Lantern Slides.—The Society possesses a large number of lantern slides dealing with various aspects of smoke abatement. These will be loaned for the use of lecturers at a charge of one penny per slide, plus postages. A catalogue of the slides will be sent on request.

Posters.—Slogan posters, size 30 in. by 20 in., four kinds, printed black and green, can be purchased at 4d. each. Large pictorial posters, printed three colours, for use on ex-E.M.B. Frames ; 10/- per set (7/6 to Affiliated Authorities).

Shade Cards for Smoke Inspection.—Tinted shade cards, showing different densities of smoke, of which the denser tints have been adopted as nuisances by magistrates hearing coal smoke complaints, are available at a price of 6d. each.

Information and Advice.—The Society is glad, at any time, to be of assistance to any person requiring information on smoke abatement and related matters. Inquiries should be addressed to the General Secretary, at Chandos House, Buckingham Gate, Westminster, S.W.1.

PUBLICATIONS of the NATIONAL SMOKE ABATEMENT SOCIETY

(All prices include postage. Reduced prices for quantities.)

RECENT PUBLICATIONS.

Proceedings of the Leeds Conference (1937) containing :

Presidential Address.

Papers on Town Planning and Smoke Abatement by J. E. Acfield and Charles Gandy.

Papers on the Regional Smoke Abatement Committees by their Chairmen or Hon. Secretaries.

Report on Education and Smoke Abatement by the Secretary and Paper by Dr. F. A. Mason (Board of Education).

Also Chairmens' Addresses and Discussions in full.

8vo. 84 pp. 1/-.

The Case Against Smoke. A new booklet which is intended to give the reader a clear understanding of the nature and extent of the smoke nuisance by means of passages from a number of writers and speakers, each of whom may be regarded as an authority in his own sphere. There are also figures and extracts from official reports and tables. Invaluable for those who write and speak on the subject. 24 pages. 4to. Price 3d.

Proceedings of the Science Museum Conference (1936). The most complete review of the problem to be published for many years. Twelve papers and discussions in full.

Technical : Methods for the Prevention of Grit and Dust Emission, by A. T. Barber and T. F. Hurley (Fuel Research Station); Smoke Prevention in the Iron and Steel Industry, by H. C. Armstrong; Smoke Emission in the Clay Industries, by E. Rowden and A. T. Green (British Refractories Research Association).

General : Solution of the Domestic Problem, by Dr. M. Fishenden; Through a Glass Darkly, by Noel Carrington; Effect of Pollution on Vegetation, by Sir Arthur Hill and Dr. C. R. Metcalfe (Kew Gardens); Developments in the Investigation of Pollution, by Dr. J. S. Owens.

Health : Pollution in Relation to Tuberculosis, by Sir Pendrill Varrier-Jones; Light and Clean Air in Relation to Surgical Tuberculosis, by Sir Henry Gauvain; Obstruction of Light by Smoke and its Effect on Health, by Sir Leonard Hill.

Administration: Public Health Administration and Smoke Abatement, by Dr. A. S. M. Macgregor (M.O.H., Glasgow); Smoke and the Sanitary Inspector, by H. G. Clinch (C.S.I., West Ham).

112 pages, 4to. Price 2/-. Limited quantity only available.

Handbook and Guide to the Science Museum Exhibition. The Handbook is not only a detailed guide to the Exhibition, but containing a series of twelve authoritative articles on the main aspects of the problem, is a permanent and useful reference book. There is a foreword by the Minister of Health, and in addition there is a series of communications from correspondents abroad on progress being made in other countries. 80 pages. Medium 8vo. Price 6d.

The Journal of the N.S.A.S. The Journal is not a record of proceedings but a magazine—the only one in the world—devoted to the problems of atmospheric pollution. Contains authoritative articles, notes on technical subjects, news of activities of every kind, and in general keeps the reader up-to-date in every aspect of the subject. Per annum, 2/6. Gratis to members.

Fumifugium; or the smoake of London Dissipated, by John Evelyn. This rare and fascinating book, first published in 1661 by command of Charles II., has been republished by the Society with an introduction by Miss Rose Macaulay. In spite of its age this indictment of the smoke evil by the author of the famous Diaries remains true, witty, and penetrating. Illustrated with original wood engravings and a portrait of Evelyn. Paper covers, 6d. Cloth-bound, 1/6.

Smoke and Fumes Nuisances from Road Vehicles. The technical and scientific aspects by Dr. J. S. Owens, A.M.Inst.C.E., M.I.Mech.E., and the legal position by R. P. Mahaffy, M.A. 8vo. pp. 16. 3d.

Smoke and Health by Dr. J. S. Taylor, M.D., D.P.H., Assistant Medical Officer of Health, Manchester. 8vo. pp. 12. 2d.

Smoke and Aviation. Full Report of the 1935 Conference on this subject. Four papers in full and discussions. "Smoke and Visibility" by C. S. Durst, B.A., Assistant Superintendent. Meteorological Office, the Air Ministry. "The Effects of Smoke upon Flying Conditions" by William Courtenay. "The Effects of Smoke upon Flying in the North" by Alan Goodfellow. "Visibility and Smoke in Relation to Aerial Photography" by Captain Alfred G. Buckham, F.R.P.S. With photographic illustrations. 8vo. pp. 40. 1/-.

Smokeless Open-Grate Fuels. Report of the Symposium held in 1934. Papers and discussions on all types of solid fuels, their uses and requirements by E. K. Regan, E. W. L. Nicol, Col. W. A. Bristow, H. Cerckel, Mrs. G. H. Miles, Dr. G. E. Foxwell, John Roberts, and Dr. E. W. Smith. 8vo. pp. 60. 1/-.

The State of the Atmosphere. "An Examination into the Effects of Atmospheric Pollution on Building Stones, etc., with a Preliminary Summary of the Conditions Disclosed by various Enquiries into the State of the Atmospheres of Great Britain," by Sir Frank Baines, K.C.V.O., C.B.E., F.R.I.B.A. An invaluable survey of the subject. Royal 8vo. pp. 36. 6d.

Home Fires Without Smoke. Edited by Cyril Elliott and Marion Fitzgerald. 8vo. pp. 59. Cloth-bound remainders, 6d.

The Smokeless Home. A popular 12-page illustrated pamphlet, with cover in colours, describing the ways and means for making the home smokeless. To be sold in quantities for general distribution. Single copies gratis. £5 per 1,000.

"Smoke Abatement and Fuel Economy in Steam Boiler Practice" (Published by the Manchester and District Regional Smoke Abatement Committee). pp. 11. 1d., post 2d.

N.S.A.S. Annual Reports. Gratis, by Post 1d.

PROCEEDINGS OF THE ANNUAL CONFERENCES.

Each with all papers in full, and discussions. 8vo. Price 1/- each.

Newcastle, 1932. Presidential Address and papers on: "The Domestic Smoke Problem: the Possibilities of Coke-Oven Fuel"; "The Psychological Effects of Smoke"; "The Human Element: A Factor in Smoke Abatement."

Glasgow, 1934. Presidential Address and Resolutions, and papers on: "The Measurement of Atmospheric Pollution"; "The Effects of Smoke upon Visibility and Aviation"; "The Effects of a Smoke-Laden Atmosphere on Horticulture"; "Nature in Beautiful"; "Slum Clearance and the Smoke Problem."

1933 and 1935—out of print.

1936—See page 7.

CONSTITUTION OF THE SOCIETY.

1. NAME.—The Society shall be called the NATIONAL SMOKE ABATEMENT SOCIETY.

2. OBJECTS.—The Society shall be concerned with the prevention of air pollution generally, and in particular, that arising from coal smoke

The objects of the Society shall be :—

- (a) To create an informed public opinion on the evils of air pollution.
- (b) To inquire into, and if thought advisable, assist investigations directed towards the abolition of smoke, whether industrial or domestic.
- (c) To take steps to popularize the use of smokeless methods of heat and power production.
- (d) To promote and support legislation for preventing the pollution of the atmosphere.

3. MEMBERSHIP.—The Society shall consist of :—

- (a) Life Members.
- (b) Members.
- (c) Associates.
- (d) Affiliated Members.

Life Members.—A donation of not less than twenty-five guineas paid in one amount by any individual, shall constitute the donor a member for life.

Members.—An Annual Subscription of not less than half a guinea in the case of an individual, or one guinea in the case of a commercial firm, shall constitute the subscriber a member. A commercial firm registered as a member shall be entitled to nominate a representative to exercise the privileges of membership as regards attendance at meetings, voting, etc.

Associates.—An Annual Subscription of not less than five shillings shall constitute that subscriber an Associate.

Affiliated Members.—The payment of not less than one guinea by any Local Authority, Society or Institution, shall constitute the subscribing body an Affiliated Member. The affiliated Member shall be entitled to appoint two representatives to the Council of the Society, who shall receive the privileges of full membership of the Society.

4. **PRIVILEGES OF MEMBERSHIP.**—The privileges of membership shall include :—

- (a) Advice and assistance in questions relating to smoke abatement and fuel economy as far as the circumstances of the Society will permit.
- (b) Free admission to lectures arranged by the Society.
- (c) The right to receive free of cost, the general publications of the Society as they appear, including the Journal of the Society. Associates shall not, however, receive the Journal and such other literature as may be decided upon from time to time.

5. **THE COUNCIL.**—The Council of the Society shall consist of the Officers, the members of the Executive Committee, two representatives from each Affiliated Member, together with not more than thirty members to be elected annually at the General Meeting.

The business of the Council shall be to direct the policy of the Society in general and to receive any periodical reports from the Executive or other committee.

The Council shall meet at least twice a year, of which at least one meeting shall take place in London.

6. **THE EXECUTIVE COMMITTEE.**—The Executive Committee shall consist of the Officers and not less than twelve members or representatives of Affiliated members, who shall be elected annually at the General Meeting of the Society. The Executive Committee shall have power to appoint sub-committees, and to co-opt additional members. Five shall form a quorum.

The Committee shall meet as required, and the place of meeting shall be at the central offices of the Society, or other place at the discretion of the Committee.

The business of the Committee shall be to manage the affairs of the Society.

7. **OFFICERS.**—The Officers of the Society shall be President, Vice-President and Honorary Treasurer, to be elected annually. The Chairman of the Committee and of the Council, shall also be Officers, but shall be elected by their respective Committees.

8.—**GENERAL MEETING.**—The General Meeting of the Society shall be held annually at which shall be presented the Annual Report and the Audited Financial Statement, and at which the Officers, the Council and the Executive Committee for the following year shall be elected. Other general meetings shall be held on the requisition of the Council or Executive Committee, or of 20 members of the Society. One month's notice shall be given of all General Meetings.

9. **ALTERATION TO CONSTITUTION.**—No change shall be made in the constitution of the Society, except by a two-thirds majority of the members present and voting at the Annual Meeting or at a Meeting called specially for the purpose. A notice in writing of any resolution to be submitted for this purpose must be sent to all members of the Society at least a fortnight before the Annual or Special General Meeting.

10. **ACCOUNTS.**—Accounts shall be kept of all moneys received and expended by the Society, and once at least every year the accounts of the Society shall be examined and the correctness thereof certified by a qualified auditor.

11. **BRANCHES.**—Branches of the Society shall be constituted, as far as possible, in the town or districts of the United Kingdom, to deal with local smoke abatement and air pollution problems. Branches shall settle their own constitution and terms of membership, but shall pay an affiliation fee of at least sixpence for every individual member and of two shillings and sixpence for every firm affiliated to the National Society, except in the case of members who are also members of the National Society. Members of the Branches who are not also members of the National Society shall be entitled to attend the General and other meetings of the Society, but shall not be entitled to vote thereat. The Branch shall, however, appoint two delegates to the Council of the National Society and to the Annual General Meeting, who shall have full voting powers.

12. **JOURNAL AND LITERATURE.**—A copy of each issue of the Journal of the Society, together with all other current general literature, shall be sent free to each member and delegate from each Affiliated member; to the Town Clerk of each affiliated Local Authority, and to the Secretary of each affiliated Society or Institution.

13. **INTERPRETATION OF CONSTITUTION.**—The interpretation of these rules together with any question on which the rules are silent shall be decided by the Executive Committee until the next Annual General Meeting.

Honorary Advisers:

ATMOSPHERIC POLLUTION.—Sir Napier Shaw, and Dr. J. S. Owens.

HEALTH.—Sir Leonard Hill, Sir Frederick Menzies, and Professor P. S. Lelean.

STEAM RAISING PROCESSES.—Messrs. J. B. Jones, E. W. L. Nicol, and H. L. Pirie.

METALLURGICAL PROCESSES.—Mr. E. C. Evans.

DOMESTIC HEATING.—Dr. Margaret Fishenden.

GAS INDUSTRY.—Sir Francis Goodenough, and Dr. E. W. Smith.

ELECTRICAL INDUSTRY.—Mr. A. P. M. Fleming.

HON. AMERICAN CORRESPONDENT.—Mr. H. B. Meller, Pittsburgh.

EIGHTH ANNUAL REPORT

for the Year ended 30th June, 1937.

General Review.—The most important event to be recorded in the present Report is the Smoke Abatement Exhibition held at the Science Museum, South Kensington, in October, 1936. This, and the conference which was arranged in conjunction with it, are dealt with more fully below. These events, together with the transfer of its offices from Manchester to London have been the Society's principal concerns during the year under review, but progress has been made and interest aroused in the subject in many other ways.

The Report of the Commissioner for Special Areas, presented to Parliament and dated 27th October, 1936, in considering the situation in South Wales, stressed very strongly the desirability smoke abatement, and stated that a greater use of the natural smokeless fuel which can be obtained in South Wales "would not only be of considerable value in providing employment in the mining areas of South Wales, but would also have the advantage of making a real contribution to smoke abatement."

"Increasing pressure," continued the Commissioner, "is being brought to bear upon manufacturers who have to comply with the requirements imposed under the Public Health Acts to reduce the emission of smoke and dust, and plant has often to be installed which involves a considerable capital outlay. Is there not a case in the interests of the public for insisting on a similar abatement of smoke from open hearths which causes so much damage and is deleterious to health? I recommend that a start should be made by insisting that all houses over an agreed rateable value should not use in open hearths anything except Welsh or other smokeless coal or fuel."

Not unconnected with this was an announcement made in the House of Commons by Mr. Ernest Brown, Minister of Labour. Arrangements had been made, he said, between the Government, the trustees of the Nuffield Trust, and Low Temperature Carbonisation, Ltd., for the erection of a large "Coalite" works in South Wales. Mention should be made also of the large new carbonisation plant opened during the year at Bolsover, Derbyshire, for the manufacture of "Coalite."

On the administrative side a feature of considerable interest is the direct attention on matters of smoke abatement now being given by the Inspectors of Alkali, etc., Works. The recent annual

report of the Chief Inspector states that the inspectors are now directly in touch with smoke abatement matters and it has been arranged that they should advise the Minister of Health on developments. A conference was held in October last between the Alkali Inspectors and representatives of Regional Committees, at which a number of questions, which are mentioned in the report, were fully discussed.

The Regional Committees continue their activities, and several have passed resolutions similar to that adopted by the Society at the Bristol Conference (1935), urging the Minister of Health to give consideration to the desirability of the qualified exemption enjoyed by certain industries under the Public Health (Smoke Abatement) Act, 1926, being now withdrawn. The problem of nuisance from burning pit heaps has received further attention by some of the Committees, and the Manchester and District Regional Committee is continuing its work in preparation for the formation of a South-East Lancashire Joint Board in place of the present advisory committee.

The Atmosphere.

It will be appropriate, in these annual reports, to refer briefly to the state of the atmosphere, as shown by the reports on the Investigation of Atmospheric Pollution, and possibly by other means. The report of the Investigation for the year ended March, 1936 (H.M. Stationery Office, 6/- net), will be reviewed in full in the August, 1937, issue of the Society's *Journal*, but mention may be made of the statement that an examination of the figures now available, in some cases going back as far as 1915, indicate good ground for belief that the smoke abatement movement has had a real effect. "It may be concluded," states the report, "that on the whole there has been a definite reduction in the extent of pollution in Britain during the past twenty years." In London the percentage of winter sunshine compared with that at Kew has risen from 20 to 55 since 1881, a very marked improvement.

Some striking observations on the heavy fogs which occurred, chiefly in the north and midlands, between 19th and 28th, November 1936, are recorded in the *Journal* for February, 1937. Respiratory diseases in the four cities of Manchester, Leeds, Liverpool, and Salford showed a rise from 61 during the week before the fog to 116 during the final week.

The Science Museum Exhibition.

As mentioned in the last annual report, the Society had suggested to the Director and Council of the Science Museum, South Kensington, that a special smoke abatement exhibition should be

organized. This was agreed to and arrangements were made for the Exhibition to be held during the month of October, 1936.

The Exhibition was organized by the Society, the Museum authorities, and a number of co-operating associations and Government departments, and a considerable amount of material was either prepared or obtained on loan. The exhibits were divided into three main sections: (1) smoke and its effects: (2) the measurement of smoke and pollution; and (3) methods for the abatement of smoke. The number of exhibits, as catalogued, was 109. A Handbook and Guide was published, and contained not only a detailed list of exhibits but a number of articles, specially written by authorities for the occasion, on the most important aspects of the problem. Also included were several communications from abroad on "What other Countries are Doing."

The Exhibition was opened on 1st October by the Minister of Health, Sir Kingsley Wood, and remained open until 31st October. It was estimated that it was visited by 35,600 people.

The responsibility for the arrangements was primarily with the Society, but it would have been impossible to have arranged it without the close co-operation of the Museum officers, and in particular Dr. F. A. B. Ward. The sectional exhibits were largely prepared and installed by the following departments and associations whose ready co-operation was very much appreciated:—The Department of Scientific and Industrial Research, the Fuel Research Station, the British Electrical Development Association, the British Gas Federation, the Coal Utilisation Council, the Low Temperature Coal Distillers' Association of Great Britain, the British Oil Burners Manufacturers' Association, the Monmouthshire and South Wales Coal Owners' Association, and the London and Counties Coke Association. Other bodies and individuals to whom our thanks are due for the loan of exhibits includes:—the Building Research Board, the Chemical Research Board, the Meteorological Office of the Air Ministry, the Office of Works, the Royal Parks, the British Leather Manufacturers' Research Association, the Manchester Literary and Philosophical Society, the Manchester Public Health Department, Messrs. Frank Partridge, Arthur R. Warnes, Esq., Dr. R. Lessing, and Dr. J. R. Ashworth.

The Annual Conference.

In view of the importance of the occasion, the 1936 Annual Conference, which was held by courtesy of the Director at the Science Museum during the course of the Exhibition, was made more representative and longer than usual. It was opened on the

morning of Wednesday, 14th October, by Captain Harry Crookshank M.P., Secretary for Mines, and ended on the following Saturday morning with the Annual General Meeting.

The programme of papers was as follows :

Wednesday morning (Chairman, Dr. H. A. Des Voeux) : "A Review of Methods for the Prevention of Grit and Dust Emission, Especially from Pulverised Fuel Furnaces," by A. T. Barber, and T. F. Hurley of the Fuel Research Station.

Wednesday afternoon (Chairman, Dr. R. Lessing) : "Modern Methods of dealing with Smoke Prevention Problems in the Iron and Steel Industry," by H. C. Armstrong, and "The Problems of Smoke Emission in the Clay Industries," by E. Rowden and A. T. Green, of the British Refractories Research Association.

Thursday morning (Chairman : Sir Francis Fremantle, M.P.) : "The Solution of the Domestic Smoke Problem," by Dr. Margaret Fishenden, and "Through a Glass Darkly," by Noel Carrington.

Thursday afternoon (Chairman, Sir Richard Gregory, Bart., F.R.S.) : "The Effects of Atmospheric Pollution on Vegetation," by Dr. C. R. Metcalfe and Sir Arthur W. Hill, F.R.S., of the Royal Botanic Gardens, Kew, and "Developments in the Investigation of Atmospheric Pollution," by Dr. J. S. Owens.

Friday morning (Chairman, Sir George Newman) : "Atmospheric Pollution in Relation to Tuberculosis," by Sir Pendrill Varrier-Jones. "Light and Clean Air in Relation to Surgical Tuberculosis," by Sir Henry Gauvain, and "The Obstruction of Light by Smoke and its Effect on Health, by Sir Leonard Hill.

Friday afternoon (Chairman, Professor Sir John Robertson) : "Public Health Administration and Smoke Abatement, by Dr. A. S. M. Macgregor, Medical Officer of Health for Glasgow, and "Smoke and the Sanitary Inspector," by H. G. Clinch, Chief Sanitary Inspector for West Ham.

The number of members and delegates attending the conference was 240, and the discussions after the papers were generally of a high order. The report of the conference, entitled *The Proceedings* was subsequently published and sold at 2/- per copy (4to., 116 pages). In view of the scope and number of the papers it constitutes one of the most valuable and up-to-date smoke abatement publications available.

Presentation to Dr. H. A. Des Voeux.

It was considered that the exhibition and conference at the Science Museum were events sufficiently outstanding to provide

a suitable opportunity for expressing our regard and appreciation of the President, Dr. H. A. Des Voeux, who has been actively associated with the movement since 1899—from then until 1929 as Hon. Treasurer of the Coal Smoke Abatement Society, and since 1929 as President of the present organization. A subscription list was opened and an illuminated address, in book form, together with a clock in green onyx, was presented to Dr. Des Voeux at a dinner held at the Rembrandt Hotel during the Conference.

Conference Resolutions.

The following resolutions were adopted at the Annual General Meeting held at the Science Museum, on 17th October, 1936 :—

(1) This meeting of the National Smoke Abatement Society, considering smoke a public nuisance, and being of the opinion that it is now practicable to secure the installation of plant and appliances for the smokeless combustion of fuels, whether for manufacturing processes, steam-raising, heating or cooking, in all new buildings (excluding for the purpose of this resolution, dwelling-houses) and in existing buildings where new plant and appliances are being installed, resolves :

- (a) That it is desirable that regulations should be drawn up to ensure that where public money, whether derived from national or local rates, is expended upon, or is used for purposes which include the purchase of, plant and appliances for the combustion of fuels, such plant or appliances should be smokeless in operation ;
- (b) That the Executive Committee be asked to seek the co-operation of other organizations likely to be interested in this question with a view to the formation of a joint committee to draft suggested regulations for this purpose, examine the methods by which they can be applied, and make appropriate representations to government departments, local authorities and other bodies expending or advancing public money : and
- (c) That government departments, local authorities and other bodies advancing or expending public money should in the meantime be urged to take all available steps to ensure that in buildings under their control all plant and appliances shall be operated smokelessly.

It is also resolved that the joint committee envisaged above in (b) be requested to consider the practicability and desirability

of regulations for the prohibition of smoke emission in specified central areas or zones of the principal cities.

(2) That this meeting of the National Smoke Abatement Society begs to draw the attention of the Minister of Health and of members of Parliament for the areas affected to the serious nuisance caused by burning pit heaps or colliery spoil banks ; and being of the opinion that, as for example instanced in the last published report on Alkali, etc., Works, measures for both the abatement and the prevention of such nuisances are practicable, expresses the desirability of legislation which will (a) permit the abatement of existing nuisances and (b) enable new pit heaps to be so controlled that such nuisances will not arise.

(3) That the Executive Committee be requested to take up with the companies concerned the question of the abatement of smoke from railways in towns.

As a result of resolution (1) a Joint Committee on the suggested lines is being set up, but a preliminary meeting only has so far been held. No. 2 has been duly forwarded to the Minister of Health and Members of Parliament concerned. It may be mentioned the subject is again discussed at length in the current Report on Alkali, etc., Works.

The third resolution was considered by the Executive Committee, and it was decided in the first place to obtain information on the subject from Local Authorities. A letter and number of questions was therefore prepared and sent to the Medical Officer of Health of the principal authorities likely to be troubled with railway smoke. Replies, containing much useful information and opinions of interest were received from forty-five authorities, and the information was incorporated in a Memorandum which has been sent to the four principal companies concerned. The Memorandum, being of some length, is not recorded here, but will be found in full in the August, 1937, issue of the *Journal*.

Housing Questionnaire.

As stated in the last Report a questionnaire had been drawn up for the purpose of obtaining from Housing authorities information on the extent to which smokeless equipment was being used in the new housing estates. Replies were received from 131 local authorities and from 46 housing societies. A report, prepared by Miss M. Fitzgerald, analyzing the replies and giving the conclusions that may be derived from them, appeared in the February, 1937, issue of the *Journal*.

Removal to London.

Considerable attention was given during the year to the proposal that the time was now opportune for the Society's headquarters offices to be transferred from Manchester to London. A review of the reasons making this move desirable is given in an article in the May, 1937, issue of the *Journal*. It was finally agreed that the move be made, and accordingly offices were sought for and secured at Chandos House, Buckingham Gate, Westminster. The move was made on 24th June, 1937. Expenses will be higher than at Manchester, but new subscriptions obtained or promised cover the estimated increase.

Physical Fitness.

At a meeting of the Executive Committee held shortly after the Government had announced its plans for a campaign and organization for increasing physical fitness, the following resolution was passed :—

“The Executive Committee of the National Smoke Abatement Society, being largely composed of members actively concerned with Public Health generally, welcomes the Government's scheme for improved physical fitness, but begs to draw attention to the fact that no such scheme can be completely successful while the majority of the population have to spend practically the whole of their lives in air made unhealthy by smoke pollution. As clean air and adequate light are primary necessities for physical health the Committee urges the Government to increase the effectiveness of its plans by giving closer attention to means for improving the condition of the atmosphere of our towns.”

The resolution was communicated to the Prime Minister, the Minister of Health, and the President of the Board of Education.

The Coronation.

A topical piece of publicity was secured shortly before the Coronation by means of a letter to the Press, urging a “civic clean up” of buildings. Not only would this make our towns brighter and more colourful for the celebrations, but would be a valuable object lesson of the “beauty and brightness lost to us by the perpetual pall of smoke which hangs over our populated areas.” The letter concluded by appealing for smoke to be reduced as much as possible during the month of May.

Publications.

In addition to the quarterly *Journal*, which continues to be successfully published and, as far as can be ascertained, appreciated by members and others to whom it is sent, the Society has published during the year the *Proceedings of the Science Museum Conference* (2/-) ; *The Case Against Smoke* (3d.) ; and *An Outline Chart of the Effects of Smoke* (gratis). *The Case Against Smoke* has proved to be a most useful reference handbook and an excellent method for securing interest in the problem.

Meetings and Exhibitions.

Many local meetings have been arranged during the year under review, and the Society has participated in Health Exhibitions at St. Helens, Wrexham, and Wakefield. During the course of the Science Museum Exhibition special visits and meetings were arranged by the Royal Institute of British Architects, the Sanitary Inspectors' Association, and the National Council of Women. At the first meeting a paper was read on the subject of "Smokeless Zones," by Miss M. Fitzgerald, Mr. Gandy, and Mr. Marsh. The last named, now being in London, will be able to take meetings in that area, while in the North the Manchester, Salford, and District Branch is prepared to make the necessary arrangements. It is, of course, possible to arrange for speakers for all types of meeting in most parts of the country, provided that inquiry is made in good time.

Other Conferences.

The Society was represented at the conference of the Sanitary Inspectors' Association by Mr. John W. Beaumont, and at the Paris Congress of the International Union of Local Authorities, at which air pollution was one of the subjects discussed, by Dr. J. Johnstone Jervis.

Manchester Smoke Abatement Exhibition.

It was hoped that it would be possible to announce that a "Smoke Abatement and Fuel Economy Exhibition" would be held during the autumn of 1937 at the City Hall, Manchester, on lines similar to the exhibition held in 1929. It is probable, however, that it will be necessary to postpone the exhibition until the spring or autumn of 1938.

Obituary.

We regret to have to record the death of Mrs. Mary Higgs, a member of the Council of the Society, at the age of 83 years. Mrs. Higgs was well-known to many members of the Society, and will be especially remembered for her work in connection with the Beautiful Oldham Society, of which she was the founder. Smoke abatement was one of the main objects of this Society, which has worked hard, under the leadership of Mrs. Higgs, to bring beauty and cleanliness to the town. This, however, was only one side of her busy and valuable life. Her work for improving the lot of the down and out, the tramp, the homeless woman, and for the welfare of mothers, was brave, direct, unsparing and successful.

Finance.

The Science Museum Exhibition involved the Society in some additional expenditure, but the heaviest item, the publication of the Handbook and Guide, fortunately almost paid for itself by means of sales and advertisements. Over £100 of additional annual income has been secured during the year, and should cover the additional expenses, due to higher rent and salaries, caused by the move to London. Subscriptions from members and affiliated authorities remain satisfactorily steady, and the support they give to the Society's work is, in the long run, preferable to larger but uncertain occasional contributions. One of the reasons influencing the transfer of our headquarters to London is that hope that contact with possible new members will be closer and more constant, and the coming year will see efforts to enlist such support.

CHARLES GANDY, *Chairman.*

WILL MELLAND, *Hon. Treasurer.*

ARNOLD MARSH, *Secretary.*

SUBSCRIPTIONS AND DONATIONS

for the Year ended June 30th, 1937

Name	Town	Amount
Acton Corporation		1 1 0
Acworth, A. W.	London	10 6
Acworth, Miss E. A.	London	1 1 0
Acworth, W. B.	London	2 2 0
Affleck and Brown, Ltd.	Manchester	2 2 0
Allen, Rev. R. E. T.	Withington	10 0
Alston, Dr. J. M.	London	10 6
Altrincham Gas Company		1 1 0
Anonymous		20 0 0
Arning, A. W.	Wilmslow	1 1 0
Ashton, Miss M.	Didsbury	1 1 0
Ashton Brothers and Co. Ltd.	Manchester	2 2 0
Ashton-under-Lyne Corporation Elec- tricity Department		1 1 0
Atkinson, Mrs. M.	London	1 0 0
Banbury Gas Company		1 1 0
Barber, S. S.	London	10 6
Barker, S.	Manchester	10 6
Barlow, Sir Thomas	London	10 6
Barrow, C. F.	Sunderland	10 6
Bath Gas Company		1 1 0
Batta, Prof. G.	Liège	10 6
Baxendale and Co. Ltd.	Manchester	2 2 0
Beard, E.	Didsbury	1 1 0
Beard, J. R.	Purley	1 1 0
Beautiful Oldham Society		1 1 0
Beckenham Corporation		1 1 0
Beckwith, J.	London	1 1 0
Bennet, M. J.	Upminster	1 0 0
Bennett, Dr. J.	Warrington	10 6
Bethnal Green Corporation		1 1 0
Bibby, J. and Sons	Liverpool	5 0 0
Bibby, J. P.	Birkenhead	2 0 0
Bingley U.D.C.		1 1 0
Birkenhead Corporation		2 2 0
Birmingham Corporation (1936)		5 5 0
Birmingham Corporation		5 5 0
Birmingham Corporation Gas Dept. ...		5 5 0
Blyth Gas Company		1 1 0
Bognor Gas and Electricity Company ...		1 1 0
Bolton Corporation		1 1 0
Bootle Corporation		5 5 0
Booth, E. R.	Hull	10 6
Bournemouth Gas and Water Co.		2 2 0
Bracey, Dr. H.	Birmingham	1 0 0
Bradford Corporation Gas Dept.		1 1 0
Bray, George and Co.	Leeds	1 1 0
Briggs, C. H.	London	10 6

Name	Town	Amount
Brighthouse Corporation Gas Committee		2 2 0
Brighton Corporation		1 1 0
Brighton, Hove and Worthing Gas Co.		3 3 0
Bristol Corporation		5 5 0
Bristol Gas Company.....		5 5 0
British Coal Distillation Ltd.	London	1 1 0
British Commercial Gas Association ..	London	25 0 0
British Electrical and Allied Manufac- turers' Association	London	5 5 0
British Elect. Development Association	London	100 0 0
British Gas Light Company	London	2 2 0
British Medical Association	London	1 1 0
Brown, G. L.	Bradford	1 1 0
Brownlie, D.	Ealing	10 6
Bullwinkle, C.	Harrogate	10 6
Burnley Corporation		2 2 0
Burnley Corporation Gas Dept.		1 1 0
Bury, Miss C.	London	10 0
Bury Corporation		2 2 0
Buxton Corporation		1 1 0
Cable Makers' Association	London	21 0 0
Cadbury Brothers	Bournville	2 2 0
Calverley and Horsforth Dist. Gas Co.		1 0 0
Camberwell Corporation		1 1 0
Cambridge University & Town Gaslight Company		1 1 0
Capper-Johnson, Dr. L.	London	10 6
Cardiff Corporation		1 1 0
Cardiff Gas Light and Coke Co.		1 1 0
Caroe, W. D.	London	1 0 0
Carr, J. D.	Manchester	1 0 0
Castleford U.D.C.		1 1 0
Cawthorn, Miss M.	Pirbright	10 6
Charrington's	London	10 6
Cheltenham Gas Light and Coke Co. ...		1 1 0
Chester Corporation		1 1 0
Chester United Gas Company		2 2 0
Chingford U.D.C.		1 1 0
Chorley Corporation		1 1 0
Clarke, D. K.	London	10 6
Claye, Dr. E.....	Stockport	10 0
Clayton, R. H.	Didsbury	2 2 0
Clevedon Gas Commpany'		1 1 0
Clinch, H. G.	West Ham	10 6
Coke Oven Managers' Association		1 1 0
Commercial Gas Company	London	3 3 0
Cooper, Miss I.	Bramhall	10 6
Crawfurd, H. E.	London	10 6
Croydon Gas Company.....		5 5 0
D. & I. Smokeless Fuels Ltd.	London	1 1 0
Daniels, S. R.	Oxford	1 1 0
Darlington Corporation		1 1 0
Dent, A. E.	London	10 6
Deptford Corporation		1 1 0

Name	Town	Amount		
Dobson, Dr. G.M.B.	Oxford	1	1	0
Doncaster Corporation		1	1	0
Drummond Patents (Holdings) Ltd. ...	London	1	1	0
Dudley, Brierley Hill & Dist. Gas Co....		1	1	0
Duguid, Mr. and Mrs. S.	Lymm	1	1	0
Ealing Corporation		1	1	0
Eastbourne Gas Company		2	2	0
East Cowes Gas Company		1	1	0
Edmonton U.D.C.		1	1	0
Elland Gas Company		1	1	0
Elsworthy, J. Gordon	London	1	11	6
Exeter Gaslight and Coke Company ...		2	2	0
Failsworth U.D.C.		1	1	0
Falk, Stadelmann and Co. Ltd.	London	1	1	0
Farnworth U.D.C.		3	3	0
Finsbury Corporation		1	1	0
Fitton, Fred A.....	Manchester	10		6
Fletcher, G. H.	Sheffield	10		6
Forster, A. Lindsay	Glasgow	1	1	0
Foss, Mrs. A.	Sevenoaks	15		0
Fothergill and Harvey Ltd.	Littleborough	1	1	0
Fox, F.	Wimbledon	10		0
Fowle, Mrs. H. C.	London	25	0	0
Fry, Miss A. R.	Thorpeness	1	0	0
Fry, Miss A.	Brent Knoll	10		0
Fulham Corporation		1	1	0
Gallenkamp, A. and Co. Ltd.	London	1	1	0
Gandy, Mr. and Mrs. H.	Corbridge	1	1	0
Gandy, Charles.....	Manchester	5	0	0
Ganter D.	Manchester	10		6
Gas Chambers and Coke Ovens Ltd. ...	London	1	1	0
Gas Light and Coke Company	London	52	10	0
Gateshead Corporation		1	1	0
General Electric Company Ltd.	London	5	5	0
Gerrard, A. D.	Manchester	10		6
Gibson, R. E.	Liverpool	10		6
Glasgow Corporation Gas Dept.		2	2	0
Gloucester Gas Light Company		1	1	0
Gloucester Corporation (1936)		1	1	0
Gloucester Corporation.....		1	1	0
Glover and Main, Ltd.	London	5	5	0
Godalming Gas and Coke Company ...		1	1	0
Goodchild, W. C.	Old Colwyn	10		6
Gravesend Corporation		1	1	0
Great Grimsby Gas Company.....		1	1	0
Great Yarmouth Gas Company.....		2	2	0
Greenwich Corporation.....		2	2	0
Grimsby Corporation		1	1	0
Guildford Gas Light and Coke Company		2	2	0
Gurney, J.	London	1	1	0
Hackney Corporation		1	1	0
Halifax Corporation		2	2	0
Halifax Corporation Gas Dept.		10	10	0
Hammersmith Corporation		1	1	0

Name	Town	Amount
Hancock, A.	Manchester	10 6
Hardy, G. and Co.	Manchester	2 2 0
Harrogate Corporation		2 2 0
Hartlepool Gas and Water Company ...		1 1 0
Haworth U.D.C. Gas Department		1 1 0
Hay, Dr. J.	Liverpool	10 6
Hayes and Harlington U.D.C.		1 1 0
Heanor, U.D.C.		1 1 0
Herbert, Mrs. N.	Buxton	10 6
Herbert, A. Ltd.	Coventry	1 1 0
Hereford Corporation		1 1 0
Herford, Miss A. C.	Withington	10 0
Herne Bay Gas Company		1 1 0
Hessle Gas Company		1 1 0
Heston and Isleworth Corporation		2 2 0
Hewitt, Hon. Mrs.		10 0
Hexham Gas Company		1 1 0
Heywood Corporation Gas Dept.		1 1 0
Higgs, Mrs. M.	Oldham	10 6
Hirst, S.	Leeds	10 6
Hoare, A.	London	10 0
Holborn Corporation		1 1 0
Holmes, W. C. and Co. Ltd.	Huddersfield	5 5 0
Horwich U.D.C.		1 1 0
Hoskin, Lt. C. H.	Plymouth	10 6
Hove Corporation		1 1 0
Howden, Jones and Co. (Land) Ltd. ...	London	1 1 0
Huddersfield Corporation		2 2 0
Hull Corporation		1 1 0
Humphrey, Miss A. M.	Weybridge	12 6
Hunter, T. J. A.	Renfrewshire	10 6
Huntley, C. G.	Manchester	10 6
Hyde, Mrs. A.	London	1 0 0
Ideal Boilers and Radiators Ltd.	London	5 5 0
Illingworth, S. E.	Weeton	1 0 0
Illingworth Carbonisation Ltd.	Bradford	1 1 0
Imperial Chemical Industries Ltd.	London	1 1 0
Institution of Gas Engineers	London	10 10 0
Institution of Heating & Ventilat'g Eng.	London	3 3 0
International Combustion Ltd.	London	1 1 0
Ipswich Gas Light Company		1 1 0
Irlam U.D.C.		1 1 0
Jaffray, R. A.	Salisbury, S. Africa	2 0 0
Jast, Mrs. S. L.	Bath	10 6
Jennison, Mrs. W.	Eastbourne	1 1 0
Johnson, E. B.	Swansea	10 6
Keeley, R.	Prestwich	10 0
Keighley Corporation		1 1 0
Kensington Corporation		1 1 0
Kershaw, J. B. C.	Cheltenham	10 6
Kershaw, J. B. C. (Donation)	Cheltenham	10 10 0
Kidderminster Corporation.		10 6
Kildwich Parish Gas Co.		1 1 0
Lacey, Stephen	London	2 2 0

Name	Town	Amount
Lamb, Mrs. H. C.	Manchester	1 1 0
Lambeth Corporation		1 1 0
Lancashire and Cheshire Gas Exhibit Committee (1936)	Manchester	2 2 0
Lancashire and Cheshire Gas Exhibit Committee	Manchester	2 2 0
Lancaster Corporation		2 2 0
Langford, A. S.	Manchester	10 6
Lapage, Dr. C. P.	Manchester	10 6
Lea Bridge District Gas Company		3 3 0
Lee, Miss D. C.	Oxford	2 2 0
Lee, Sir K.	Manchester	1 1 0
Lees, Miss M.	Oldham	1 1 0
Leeds Corporation		10 10 0
Leeds Corporation Gas Department ...		10 10 0
Leicester Corporation		10 10 0
Leicester Corporation Gas Dept.		3 3 0
Lessing, Dr. R.	London	1 1 0
Leyton Corporation		1 1 0
Lincoln Corporation		2 2 0
Liptak Furnace Arches Ltd.	London	1 1 0
Liverpool Corporation (1936)		3 3 0
Liverpool Corporation		10 10 0
Liverpool Gas Company		10 10 0
London, City of, Elec. Light'g Co. Ltd.		2 2 0
London and Counties Coke Assoc.	London	1 1 0
London Electricity Supply Assoc.	London	10 10 0
London Power Company	London	1 1 0
Longley, J. A.	London	1 1 0
Lowestoft Water and Gas Company ...		2 2 0
Low Temperature Carbonisation Ltd.	London	10 10 0
Luton Gas Company		2 2 0
Maidstone Gas Company		1 1 0
Maldens and Coombe U.D.C.		1 1 0
Manchester Corporation		26 5 0
Manchester Corporation Gas Dept. ...		5 5 0
Manchester Corporation Elect. Dept. ...		2 2 0
Manger, H. A.	London	10 6
Mansfield Corporation		1 1 0
Mather, Capt. L. E.	Newton Heath	1 0 0
Meadowcroft, S.	Bradford	10 6
Melland, Will.	Manchester	5 0 0
Melland, Mrs. W.	Manchester	1 1 0
Meller, Dr. H. B.	Pittsburgh	10 6
Middleton Corporation		1 1 0
Mid-Kent Gaslight and Coke Co.		1 1 0
Mirfield U.D.C.		1 1 0
Mirfield Gas Company		1 1 0
Mitcham Corporation		3 3 0
Monmouthshire and South Wales Coal Owners' Association	Cardiff	50 0 0
Moore, S. H.	Chester	10 6
Morgan, D. and Sons	Cardiff	1 1 0
McDougall, A.	Charlestown	1 1 0

Name	Town	Amount
McFie, Mrs. M. S.....	Cambridge	10 6
MacMillan, A. M.	Edinburgh	10 6
MacWilliam, Dr. H. H.	Liverpool	10 6
Newcastle-under-Lyme Corporation ...		1 1 0
Newcastle-upon-Tyne Corporation		5 5 0
Newcastle & Gateshead Gas Co.		1 1 0
Newton, Lord	London	1 1 0
North Middlesex Gas Company		2 2 0
Nottingham Corporation		5 5 0
Oldham Corporation		5 5 0
Oldham Corporation Gas Company ...		2 2 0
Osborne, Dr. H. (1936)	Salford	1 1 0
Osborne, Dr. H.	Salford	1 1 0
Oxford and District Gas Company		1 1 0
Parkinson Stove Co. Ltd.	London	2 2 0
Peake, H.	Newark	10 6
Pearson, Dr. S. V.	Mundesley	10 0
Polding, W.	Wigan	10 6
Pontefract Brothers	Manchester	1 1 0
Poplar Corporation		1 1 0
Portsmouth and Gosport Gas Co.....		1 1 0
Powell, Maj.-Gen. S. H.	Walmer	1 0 0
Powell, Maj.-Gen. S. H.	Walmer	1 1 0
Power Gas Corporation Ltd.	Stockton-on-Tees ...	1 1 0
Preston Corporation		1 1 0
Preston Gas Company		1 1 0
Preston, J. R.	London	10 6
Prior Oil Burners Ltd.	London	1 1 0
Pudsey Corporation		1 1 0
Radcliffe Corporation		1 1 0
Radiation Ltd.	London	5 5 0
Radiovisor Parent Ltd.	London	2 2 0
Rathbone, P. R.	Wimbledon	10 6
Redditch Gas Company		1 1 0
Refuge Assurance Company	Manchester	5 5 0
Reynolds, Miss M.	Heaton Moor	10 6
Rhondda, Lady	London	10 6
Richmond Corporation		1 1 0
Robertson, R.	Bristol	10 6
Robinson, Mrs. S.	Hale	10 0
Rochdale Corporation		3 3 0
Rowley Regis Corporation		2 2 0
Royton U.D.C.		1 1 0
Salford Corporation Gas Committee ...		2 2 0
Salford Corporation		1 1 0
Salisbury-Jones, F. W.	London	2 2 0
Sanger, Mrs. A. D.	Chelsea	1 0 0
Sanitary Inspectors' Association	London	1 1 0
Scarborough Corporation		1 1 0
Scarborough Gas Company		1 1 0
Scottish Branch N.S.A.S.....	Glasgow	3 3 0
Seale, Mrs. I. L.	Prestatyn	10 6
Seiffert (Great Britain) Ltd.	London	1 1 0
Shaw, Mrs. G. B.	London	3 3 0

Name	Town	Amount
Shaw, Sir Napier	London	2 2 0
Sheffield Gas Company		1 1 0
Sheffield, Rotherham & District Smoke Abatement Committee		25 0 0
Shipley U.D.C.		1 1 0
Shoreditch Corporation		1 1 0
Shrewsbury Gas Light Company		1 1 0
Siedler, Dr. P.	Frankfurt A.M.	15 0
Simon, Sir Ernest	Cheadle Heath	2 2 0
Smith and Wellstood, Ltd.	London	1 1 0
Smoke Prevention Ltd.	London	1 1 0
Solihull Gas Company		1 1 0
Southall-Norwood U.D.C.		1 1 0
Southampton Corporation		1 1 0
Southampton Gaslight and Coke Co. ...		1 1 0
Southend-on-Sea Corporation		1 1 0
Southern, G. W.	Sheffield	10 6
Southgate and District Gas Company ...	London	2 2 0
South Shields Gas Company		1 1 0
South Suburban Gas Company	London	5 5 0
Southwark Corporation		1 1 0
Spenborough U.D.C. Gas Dept.		2 2 0
St. Helens Corporation		1 1 0
Stalybridge Corporation		1 1 0
Stepney Corporation		1 1 0
Stockport Corporation Gas Committee		2 2 0
Stoke-on-Trent Corporation		5 5 0
Stoke-on-Trent Corporation Gas Dept.		1 1 0
Stourbridge Corporation Gas Dept		1 1 0
Stretford Corporation		2 2 0
Stretford and District Gas Board		1 1 0
Sunderland Corporation		5 5 0
Sunderland Gas Company		1 1 0
Swindon United Gas Company		1 1 0
Tanner, A. E.	Manchester	2 2 0
Taylor, H. F.	Disley	10 6
Thomas, J. W.	Manchester	10 6
Tootal Broadhurst Lee & Co. Ltd.	Manchester	3 3 0
Tottenham Corporation		1 1 0
Tottenham and District Gas Co.		5 5 0
Trezise, W. E.	Wolverhampton ...	1 1 0
Trier, F. N. (1936)	Kensington	1 1 0
Trier, F. N.	Kensington	1 1 0
Troup, Lady W.		
Turbine Furnace Company Ltd.	Kensington	10 0
Uxbridge U.D.C.	London	1 1 0
Uxbridge, Maidenhead, Wycombe and District Gas Company		2 2 0
Voeux, Dr. H. A. Des	Lymington	1 1 0
Wakefield Corporation		2 2 0
Wakefield Gaslight Company		1 1 0
Wallasey Corporation		5 5 0
Walsall Corporation		1 1 0
Walthamstow Corporation		1 1 0

Name	Town	Amount
Wandsworth Corporation		1 1 0
Wandsworth and Dist. Gas Company ...		5 5 0
Ward, Dr. F. A. B.	Southgate	10 6
Warner, A.	Wimbledon	1 1 0
Warrington Corporation		2 2 0
Waterhouse, Mrs. T. C.	Bakewell	2 0 0
Wednesbury Corporation		10 6
Wembley U.D.C.		1 1 0
West Bromwich Corporation		1 1 0
Westminster Corporation		1 1 0
Weston-super-Mare U.D.C.		1 1 0
Weston-super-Mare Gas Company		1 1 0
West's Gas Improvement Co. Ltd.	Manchester	5 5 0
Whipple, Dr. F. J. W.	London	1 0 0
Widnes Corporation		1 1 0
Wigglesworth, Miss E.	Rawtenstall	10 0
Willesden Corporation		1 1 0
Willey and Co. Ltd.	Exeter	2 2 0
Williamson, D. B.	London	10 0
Windel, D.	Liverpool	1 1 0
Wolverhampton Corporation Electricity Department		1 1 0
Wolverhampton Gas Company		2 2 0
Woodall-Duckham and Co.	London	5 5 0
Wrexham Corporation		1 1 0
Yeadon and Guisley Gas Company ...		1 10 0
York Gas Company		10 0 0
Young, Mrs. T. M.	Withington	10 6
Young, Dr. J. S.	St. Louis, U.S.A. ...	10 6
Subscriptions and Donations under 10/-		14 7 4

Total... £1027 10 4

THE NATIONAL SMOKE ABATEMENT SOCIETY.

Income and Expenditure Account, for the Year ended June 30th, 1937.

1936.			INCOME.			1937.			1936.			EXPENDITURE.		
£	s.	d.		£	s.	d.		£	s.	d.		£	s.	d.
956	2	0	Subscriptions and Donations	1027	10	4		445	7	0	Salaries	563	6	11
88	0	0	Sale of Posters.....					127	18	0	Rent, Rates, Gas, Water and Electricity	68	8	1
41	4	2	Sale of Literature.....	72	9	4					Cost of Exhibition Handbook, less receipts from advertising and sales	10	5	6
61	19	0	Conference Fees.....	119	14	0					Exhibition Expenses	80	13	4
6	15	6	Repayment of Income Tax	2	0	11					Printing, Stationery and Advertising	270	8	9
			Dividends from Investments :—								Removal Expenses	26	0	3
7	16	10	Comm. Union Assr. Co. Ltd.	7	14	5		252	16	8	Travelling Expenses	26	11	3
9	14	0	London Midland & Scottish Rly. ...	9	10	10		53	1	8	Photographic Competition, Awards and Purchases			
7	1	6	Interest M. & S. Savings Bank.....	5	6	2		35	3	6	General Expenses, Postages and Telephone	165	5	11½
2	12	0	Sundry Receipts	2	18	8		109	6	1	Surplus of Income over Expenditure	36	4	7½
£1181	5	0		£1247	4	8		£1181	5	0		£1247	4	8

Balance Sheet, June 30th, 1937.

SURPLUS:					
Balance as at June, 1936	£	s. d.		£	s. d.
<i>Add</i> Surplus of Income over	979	18 8			
Expenditure	36	4 7½			
		<hr/>	1016	3	3½
	£1016	3	3½		

INVESTMENTS:						
Commercial Union Assurance Co. Ltd.,		£	s. d.		£	s. d.
£25 Stock at Cost	205	11	0			
London Midland & Scottish Rly. Co.,						
£313 4 per cent. Debenture Stock						
at Cost	279	5	11			
Manchester & Salford Savings Bank,						
Deposit	203	7	1			
		<hr/>			688	4 0
Cash in Bank and in Hand June 30th, 1937.....					327	19 3½
	£1016	3	3½			

MEMBERSHIP FORMS

INDIVIDUAL.

To the General Secretary, National Smoke Abatement Society,
Chandos House, Buckingham Gate, Westminster, S.W.1.

Kindly admit the undersigned as a Member/an Associate of
the Society. A first Annual Subscription is enclosed, to date
from 193.....

Signed

Address in full.....

Minimum Subscription for members
(including Journal) 10/6.
Associate Subscription 5/-.
Life Membership Subscription £25.

COMMERCIAL FIRMS AND AFFILIATED MEMBERS.

(See Constitution, Sections 3 and 4).

To the General Secretary, National Smoke Abatement Society,
Chandos House, Buckingham Gate, Westminster, S.W.1.

Kindly admit the undersigned as a member of the Society,
A first Annual Subscription of £ : is enclosed.
to date from 193.....

Signed

On behalf of

Address

Representative(s) appointed

Address Communications to { Firm
 { Representative.

Minimum Subscription, One Guinea.

DONATION FORM.

*To the General Secretary, National Smoke Abatement Society,
Chandos House, Buckingham Gate, Westminster, S.W.1.*

I enclose £..... as a donation to the Society, and
would be pleased to receive notices, literature, etc., from time
to time. (Delete latter clause if desired).

Signed

Address

.....
.....

To be forwarded to the Society.

BANK ORDER FORM.

To the Manager,

The Bank.

Please pay the sum of £ : : immediately
and on the same date in each succeeding year until further notice,
to the credit of the NATIONAL SMOKE ABATEMENT SOCIETY, with
the District Bank Ltd., 57 Victoria Street, Westminster, S.W.1.

Signed

Address

.....
.....

Date.....193.....

FORM OF BEQUEST.

“I give free of duty to the National Smoke Abatement Society
of Chandos House, Buckingham Gate, Westminster, S.W.1., the
sum of £.....to be applied to the general purposes of the
said Society, and I declare that the receipt of the Treasurer for the
time being shall be a sufficient discharge to my Executors for the
same.”

P.T.O.

In Course of Preparation.

The Law of Smoke Nuisances

Being "The Law Relating to Smoke
and Noxious Fumes" by the late
RANDOLPH A. GLEN, M.A., LL.B.,
extended and revised in accordance
with the Public Health Act, 1936,

BY

W. R. HORNBY STEER, M.A., LL.B.

RECORDER OF SOUTH MOLTON

(Standing Counsel to the Society)

To be published early in 1938 at 1/- each, post free.

Special prices for quantities.

Orders placed prior to publication will be appreciated.

The National Smoke Abatement Society



NINTH
ANNUAL
REPORT
1938-9

NINTH ANNUAL REPORT
of the
**National Smoke Abatement
Society**

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1938
CHANDOS HOUSE
BUCKINGHAM GATE
WESTMINSTER, S.W.1,

National Smoke Abatement Society

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Chairman : CHARLES GANDY.

Hon. Treasurer : WILL MELLAND, M.A., J.P.

Hon. Advisory Secretary : Sir LAWRENCE CHUBB.

Standing Counsel : W.R. HORNBY STEER, M.A., LL.B.

General Secretary and Editor : ARNOLD MARSH, M.Sc.Tech., M.Inst.F.

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Major H. J. Gillespie.	Professor C. H. Reilly, O.B.E., M.A., F.R.I.B.A.
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Dr. R. Veitch Clark, M.A., B.Sc., M.B., Ch.B., D.P.H.	Alderman W. Muirhead.
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	Dr. E. H. Walker, M.B., Ch.B., D.P.H.

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Alexander M. Riddett

Affiliated Societies and Representatives Appointed to the Council :

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A. Arthurs.

British Medical Association—

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Coke Oven Managers' Association—

F. White, J. Cappy.

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C.E., M.Inst.Mar.E., A.M.I.E.E.

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Institution of Gas Engineers—

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T. E. Birtwisle, F.S.I.A.

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Dr. Cyril Banks, M.D., B.S.,
D.P.H., Dr. J. Johnstone Jervis,
D.P.H.

Affiliated Local Authorities and Representatives Appointed to the Council :

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Bowater, Councillor J. B. Fuller.

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Batley.—

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ecutive).

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Royton.—Councillor T. H. Lowe, Ellis Harrison.

Rowley Regis.—Chairman of the Health Committee, Dr. F. Asker.

Salford.—

Scarborough.—Alderman Bielby, Dr. S. Fox Linton.

Sheffield, Rotherham and District Smoke Abatement Committee.—Councillor W. Asbury, J.P., (Executive), James Law.

Shipley.—

Shoreditch.—Councillor Mrs. D. Thurtle, Dr. E. H. R. Smithard, M.D., D.P.H.

Smethwick.—(Major) Councillor T. Clyde McKenzie (Deputy Mayor), Councillor F. W. Perry.

Southall.—Dr. E. H. R. Smithard, M.D., D.P.H., I. A. Stephenson.

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Southend-on-Sea.—Chairman of the Sanitary Committee.

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Stepney.—Councillor J. J. A. Long, Councillor Mrs. A. P. Bunn.

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Stretford.—Councillor H. Lord, Dr. E. H. Walker, M.B., Ch.B., D.P.H. (Executive).

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Tottenham.—Councillor A. R. Turner, Medical Officer of Health.

Urmston.—

Uxbridge.—Councillor T. R. Thirtle,

Wakefield.—Councillor S. Butterworth.

Wallasey.—Dr. R. B. Berry, Alderman D. P. Charlesworth.

Walsall.—C. A. Stansbury.

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West Ham.—Councillor Mrs. A. A. Barnes, H. G. Clinch.

Weston-Super-Mare.

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Wood Green.—Alderman E. J. Anderson.

Wrexham.—Councillor Mrs. C. Jones, Councillor E. S. E. Hackett.

Local Authorities affiliated to the Scottish Branch :

Airdrie, Clydebank, Coatbridge, Dumbarton, Dundee, Edinburgh, Falkirk, Glasgow, Greenock, Hamilton, Irvine, Johnstone, Kirkcaldy, Kirkintilloch, Motherwell

and Wishaw, Paisley, Port Glasgow, Rothesay, Rutherglen. County Councils of Ayr, Dunbarton (Western District), Lanark, Renfrew,

Information Concerning the Society

The National Smoke Abatement Society was formed in 1929 by the amalgamation of the Coal Smoke Abatement Society (1899) and the Smoke Abatement League of Great Britain (1909). It is an organization dependent entirely upon voluntary support, and its objects and the conditions of membership will be found in the constitution, on another page.

Offices.—Central (General Secretary's) Offices : Chandos House, Buckingham Gate, Westminster, S.W.1. Tel. : ABBey 1359.
Scottish Branch : City Chambers, Glasgow.
North-Western Branch : 65, Barton Arcade, Deansgate, Manchester, 2.

Lectures.—Lectures can be arranged in all parts of the country, and full information, with a Panel of Lecturers, is given in a leaflet "Lectures on the Smoke Problem," which can be obtained on application. As a rule the only charge is for the travelling expenses of the lecturer.

Exhibits.—The Society is prepared to loan smoke abatement exhibits, suitable for use at health and other exhibitions, free of charge ; or to take and equip stands at such exhibitions. A list of exhibits available will be sent on request.

Lantern Slides.—The Society possesses a large number of lantern slides dealing with various aspects of smoke abatement. These will be loaned for the use of lecturers at a charge of one penny per slide, plus postages. A catalogue of the slides will be sent on request.

Posters.—Slogan posters, size 30 in. by 20 in., four kinds, printed black and green, can be purchased at 4d. each. Large pictorial posters, printed three colours, for use on ex-E.M.B. Frames ; 10/- per set (7/6 to Affiliated Authorities). New pictorial posters, 30 ins. by 20 ins. are in course of preparation.

Shade Cards for Smoke Inspection.—Tinted shade cards, showing different densities of smoke, of which the denser tints have been adopted as nuisances by magistrates hearing coal smoke complaints, are available at a price of 6d. each.

Information and Advice.—The Society is glad, at any time, to be of assistance to any person requiring information on smoke abatement and related matters. Inquiries should be addressed to the General Secretary, at Chandos House, Buckingham Gate, Westminster, S.W.1,

PUBLICATIONS of the NATIONAL SMOKE ABATEMENT SOCIETY

(All prices include postage. Reduced prices for quantities).

RECENT PUBLICATIONS.

Proceedings of the Cardiff Conference (1938), containing :—

Presidential and Chairmen's Addresses.

Papers on "The Administration of the Law and Co-operation with Manufacturers," by Dr. Greenwood Wilson; "The Training of Stokers," by S. N. Duguid; "Welsh Smokeless Coals," by Thomas Dixon; "Gas in South Wales," by W. Clark Jackson; "Electricity in South Wales," by James F. Smith; "Low Temperature Carbonization in South Wales," by Col. W. A. Bristow.

Resolutions and Discussions in Full. 8vo., 1/-. (Ready early 1939).

The Law of Smoke Nuisances. By W. R. Hornby Steer, M.A. LL.B., Recorder of South Molton, Standing Counsel to the Society. This book, based on an earlier work by Randolph A. Glen and revised and extended in accordance with the Public Health Acts of 1936, is likely to be accepted as a standard work on the subject. In addition to the explanatory chapters, it contains tables of statutes and cases and the relevant sections from the two Acts and the Local Government Act, 1933. 8vo. 65 pages. 1/- paper-backed; 2/6 cloth-bound.

Britain's Burning Shame. This pamphlet has been described, in a review, as "a masterpiece of modern popular propaganda." It puts the smoke problem in its simplest terms, especially as it affects the home, and is profusely illustrated. Invaluable for meetings, exhibitions, and in any campaign based on smoke abatement. Single copies 2d. 12/6 per 100. £5 per 1,000.

The Case Against Smoke. A booklet which is intended to give the reader a clear understanding of the nature and extent of the smoke nuisance by means of passages from a number of writers and speakers, each of whom may be regarded as an authority in his own sphere. There are also figures and extracts from official reports and tables. Invaluable for those who write and speak on the subject. 24 pages. 4to. Price 3d.

Proceedings of the Science Museum Conference (1936). The most complete review of the problem to be published for many years. Twelve papers and discussions in full.

Technical: Methods for the Prevention of Grit and Dust mission, by A. T. Barber and T. F. Hurley (Fuel Research Station); Smoke, Prevention in the Iron and Steel Industry, by H. C. Armstrong; Smoke Emission in the Clay Industries, by E. Rowden and A. T. Green; (British Refractories Research Association).

General: Solution of the Domestic Problem, by Dr. M. Fishenden; Through a Glass Darkly, by Noel Carrington; Effect of Pollution on Vegetation, by Sir Arthur Hill and Dr. C. R. Metcalfe (Kew Gardens); Developments in the Investigation of Pollution, by Dr. J. S. Owens.

Health: Pollution in Relation to Tuberculosis, by Sir Pendrill Varrier-Jones; Light and Clean Air in Relation to Surgical Tuberculosis, by Sir Henry Gauvain; Obstruction of Light by Smoke and its Effect on Health, by Sir Leonard Hill.

Administration: Public Health Administration and Smoke Abatement, by Dr. A. S. M. Macgregor (M.O.H., Glasgow); Smoke and the Sanitary Inspector, by H. G. Clinch (C.S.I., West Ham).

112 pages, 4to. Price 2/-. Limited quantity only available.

Handbook and Guide to the Science Museum Exhibition. The Handbook is not only a detailed guide to the Exhibition, but containing a series of twelve authoritative articles on the main aspects of the problem, is a permanent and useful reference book. There is a foreword by the Minister of Health, and in addition there is a series of communications from correspondents abroad on progress being made in other countries. 80 pages. Medium 8vo. Price 6d.

The Journal of the N.S.A.S. The Journal is not a record of proceedings, but a magazine—the only one in the world—devoted to the problems of atmospheric pollution. Contains authoritative articles, notes on technical subjects, news of activities of every kind, and in general keeps the reader up-to-date in every aspect of the subject. Per annum, 2/6. Gratis to members.

Fumifugium: or the Smoake of London Dissipated, by John Evelyn. This rare and fascinating book, first published in 1661 by command of Charles II., has been republished by the Society with an introduction by Miss Rose Macaulay. In spite of its age this indictment of the smoke evil by the author of the famous Diaries remains true, witty, and penetrating. Illustrated with original wood engravings and a portrait of Evelyn. Paper covers 6d. Cloth-bound, 1/6.

Smoke and Fumes Nuisances from Road Vehicles. The technical and scientific aspects by Dr. J. S. Owens, A.M.Inst.C.E., M.I.Mech.E., and the legal position by R. P. Mahaffy, M.A. 8vo. pp. 16. 3d.

Smoke and Aviation. Full Report of the 1935 Conference on this subject. Four papers in full and discussions. "Smoke and Visibility," by C. S. Durst, B.A., Assistant Superintendent. Meteorological Office, the Air Ministry. "The Effects of Smoke upon Flying Conditions," by William Courtenay. "The Effects of Smoke upon Flying in the North," by Alan Goodfellow, "Visibility and Smoke in Relation to Aerial Photography," by Captain Alfred G. Buckham, F.R.P.S. With photographic illustrations. 8vo. pp 40. 1/-.

Smokeless Open-Grate Fuels. Report of the Symposium held in 1934. Papers and discussions on all types of solid fuels, their uses and requirements, by E. K. Regan, E. W. L. Nicol, Col. W. A. Bristow, H. Cerckel, Mrs. G. H. Miles, Dr. G. E. Foxwell, John Roberts, and Dr. E. W. Smith. 8vo. pp. 60. 1/-.

The State of the Atmosphere.—"An Examination into the Effects of Atmospheric Pollution on Building Stones, etc., with a Preliminary Summary of the Conditions Disclosed by various Enquiries into the State of the Atmospheres of Great Britain," by Sir Frank Baines, K.C.V.O., C.B.E., F.R.I.B.A. An invaluable survey of the subject. Royal 8vo. pp. 36. 6d.

Home Fires Without Smoke. Edited by Cyril Elliott and Marion Fitzgerald. 8vo. pp. 59. Cloth-bound remainders, 6d.

The Smokeless Home. A popular 12-page illustrated pamphlet. with covers in colours, describing the ways and means for making the home smokeless. To be sold in quantities for general distribution. Single copies gratis. £5 per 1,000.

"Smoke Abatement and Fuel Economy in Steam Boiler Practice" (Published by the Manchester and District Regional Smoke Abatement Committee). pp. 11. 1d., post 2d.

N.S.A.S. Annual Reports. Gratis, by Post 1d.

PROCEEDINGS OF THE ANNUAL CONFERENCES.

Each with all papers in full, and discussions. 8vo. Price 1/- each.

Newcastle, 1932. Presidential Address and papers on: "The Domestic Smoke Problem: the Possibilities of Coke-Oven Fuel"; "The Psychological Effects of Smoke"; "The Human Element: A Factor in Smoke Abatement."

Glasgow, 1934. Presidential Address and Resolutions, and papers on: "The Measurement of Atmospheric Pollution"; "The Effects of Smoke upon Visibility and Aviation"; "The Effects of a Smoke-Laden Atmosphere on Horticulture"; "Nature in Beautiful"; "Slum Clearance and the Smoke Problem."

1933 and 1935—out of print.

1936—See page 7.

Leeds, 1937.—Presidential and Chairman's Addresses, Papers on Town Planning and Smoke Abatement, The Regional Smoke Abatement Committees, and Education and Smoke Abatement.

CONSTITUTION OF THE SOCIETY.

1. NAME.—The Society shall be called the NATIONAL SMOKE ABATEMENT SOCIETY.

2. OBJECTS.—The Society shall be concerned with the prevention of air pollution generally, and in particular, that arising from coal smoke.

The objects of the Society shall be :—

- (a) To create an informed public opinion on the evils of air pollution.
- (b) To inquire into, and if thought advisable, assist investigations directed towards the abolition of smoke, whether industrial or domestic.
- (c) To take steps to popularize the use of smokeless methods of heat and power production.
- (d) To promote and support legislation for preventing the pollution of the atmosphere.

3. MEMBERSHIP.—The Society shall consist of :—

- (a) Life Members.
- (b) Members.
- (c) Associates.
- (d) Affiliated Members.

Life Members.—A donation of not less than twenty-five guineas paid in one amount by any individual, shall constitute the donor a member for life.

Members.—An Annual Subscription of not less than half a guinea in the case of an individual, or one guinea in the case of a commercial firm, shall constitute the subscriber a member. A commercial firm registered as a member shall be entitled to nominate a representative to exercise the privileges of membership as regards attendance at meetings, voting, etc.

Associates.—An Annual Subscription of not less than five shillings shall constitute that subscriber an Associate.

Affiliated Members.—The payment of not less than one guinea by any Local Authority, Society or Institution, shall constitute the subscribing body an Affiliated Member. The affiliated Member shall be entitled to appoint two representatives to the Council of the Society, who shall receive the privileges of full membership of the Society.

4. PRIVILEGES OF MEMBERSHIP.—The privileges of membership shall include :—

- (a) Advice and assistance in questions relating to smoke abatement and fuel economy as far as the circumstances of the Society will permit.
- (b) Free admission to lectures arranged by the Society.
- (c) The right to receive free of cost, the general publications of the Society as they appear, including the Journal of the Society. Associates shall not, however, receive the Journal and such other literature as may be decided upon from time to time.

5. THE COUNCIL.—The Council of the Society shall consist of the Officers, the members of the Executive Committee, two representatives from each Affiliated Member, together with not more than thirty members to be elected annually at the General Meeting.

The business of the Council shall be to direct the policy of the Society in general and to receive any periodical reports from the Executive or other committee.

The Council shall meet at least twice a year, of which at least one meeting shall take place in London.

6. THE EXECUTIVE COMMITTEE.—The Executive Committee shall consist of the Officers and not less than twelve members or representatives of Affiliated members, who shall be elected annually at the General Meeting of the Society. The Executive Committee shall have power to appoint sub-committees, and to co-opt additional members. Five shall form a quorum.

The Committee shall meet as required, and the place of meeting shall be at the central offices of the Society, or other place at the discretion of the Committee.

The business of the Committee shall be to manage the affairs of the Society.

7. OFFICERS.—The Officers of the Society shall be President, Vice-President and Honorary Treasurer, to be elected annually. The Chairman of the Committee and of the Council, shall also be Officers, but shall be elected by their respective Committees.

8.—GENERAL MEETING.—The General Meeting of the Society shall be held annually at which shall be presented the Annual Report and the Audited Financial Statement, and at which the Officers, the Council and the Executive Committee for the following year shall be elected. Other general meetings shall be held on the requisition of the Council or Executive Committee, or of 20 members of the Society. One month's notice shall be given of all General Meetings.

9. **ALTERATION TO CONSTITUTION.**—No change shall be made in the constitution of the Society, except by a two-thirds majority of the members present and voting at the Annual Meeting or at a Meeting called specially for the purpose. A notice in writing of any resolution to be submitted for this purpose must be sent to all members of the Society at least a fortnight before the Annual or Special General Meeting.

10. **ACCOUNTS.**—Accounts shall be kept of all moneys received and expended by the Society, and once at least every year the accounts of the Society shall be examined and the correctness thereof certified by a qualified auditor.

11. **BRANCHES.**—Branches of the Society shall be constituted, as far as possible, in the town or districts of the United Kingdom, to deal with local smoke abatement and air pollution problems. Branches shall settle their own constitution and terms of membership, but shall pay an affiliation fee of at least sixpence for every individual member and of two shillings and sixpence for every firm affiliated to the National Society, except in the case of members who are also members of the National Society. Members of the Branches who are not also members of the National Society shall be entitled to attend the General and other meetings of the Society, but shall not be entitled to vote thereat. The Branch shall, however, appoint two delegates to the Council of the National Society and to the Annual General Meeting, who shall have full voting powers.

12. **JOURNAL AND LITERATURE.**—A copy of each issue of the Journal of the Society, together with all other current general literature shall be sent free to each member and delegate from each Affiliated member ; to the Town Clerk of each affiliated Local Authority, and to the Secretary of each affiliated Society or Institution.

13. **INTERPRETATION OF CONSTITUTION.**—The interpretation of these rules together with any question on which the rules are silent shall be decided by the Executive Committee until the next Annual General Meeting.

Honorary Advisers:

ATMOSPHERIC POLLUTION.—Sir Napier Shaw, and Dr. J. S. Owens.

HEALTH.—Sir Leonard Hill, Sir Frederick Menzies, and Professor P. S. Lelean.

STEAM RAISING PROCESSES.—Messrs. J. B. Jones, E. W. L. Nicol, and H. L. Pirie.

METALLURGICAL PROCESSES.—Mr. E. C. Evans.

DOMESTIC HEATING.—Dr. Margaret Fishenden.

GAS INDUSTRY.—Sir Francis Goodenough, and Dr. E. W. Smith.

ELECTRICAL INDUSTRY.—Mr. A. P. M. Fleming.

HON. AMERICAN CORRESPONDENT.—Dr. H. B. Meller, Pittsburgh.

NINTH ANNUAL REPORT

for the Year ended 30th June, 1938.

General Review.

Before reviewing the activities of the Society, which it will be seen has had a busy and successful year of work, reference may be made to other events which have helped or directed attention to the movement. In these days references to the need for smoke abatement in speeches and writings, in Parliament and other important assemblies, have become so numerous that it is unnecessary to record them, but they indicate perhaps better than anything else a lively concern about the state of the atmosphere which, year by year, can be seen to be growing.

Two new Advisory Regional Committees have been formed ; one known as the Greater London Advisory Council for Smoke Abatement, and the other covering the Bristol-Bath area. There is now a total of eight such committees, all advisory with the exception of one. Progress has been made, however, towards the formation of a Statutory Board for Manchester and District in place of the existing Advisory Committee.

Record should be made of the important Presidential Address of the late Sir Philip Dawson, M.P., to the Institute of Fuel. Not only was this marked by a number of valuable and outspoken comments upon atmospheric pollution and the need for its abatement, but the strong and reasoned demand for a co-ordination of all the fuel industries and for a planned national fuel policy, with which the address concluded, suggests developments that would be of fundamental importance to the smoke abatement movement.

The latest (74th) report on Alkali, etc., Works, deals fully with the problems of industrial smoke with which the Inspectors have been concerned during the year. Most of the complaints, it is stated, have related to grit emission from boiler installations, coal and coke grading plant, and from the handling of pulverised coal. Much attention is also given to the problem of burning colliery spoilbanks, and in other ways too this particular and apparently increasing problem has engaged attention. The District Inspectors, the report mentions, have continued to be actively engaged in co-operation with the regional committees and local authorities on matters of smoke pollution, although, it is pointed out, they possess no statutory powers in this connection and can only act in an advisory capacity.

The Atmosphere.

The report on the Investigation of Atmospheric Pollution issued during the year under review does not show any marked change in the records of pollution as compared with previous years. For total solids there was a reduction of 10 per cent. or more in the case of 43 per cent. of the stations, an increase in the case of 17 per cent., and no change in the remaining 40 per cent. The report states that on 1st April, 1937, it was possible to begin routine observations with most of the apparatus at the twelve stations in and around Leicester, where an intensive survey has been begun on the pollution of an industrial town fairly well isolated from other sources of pollution.

The Conference at Leeds.

The Ninth Annual Conference of the Society was held at Leeds, by invitation of the Health Committee, on September 30th, October 1st and 2nd, 1937. There was an attendance of 189 delegates, including a number from Yorkshire towns not previously represented at the Conferences, and in addition many members of the West Riding of Yorkshire Advisory Regional Smoke Abatement Committee attended as visitors. The publicity given to the proceedings by the Press was excellent, and over 230 cuttings reporting the meetings were received.

The main discussions were on "Town Planning and Smoke Abatement," with papers by J. E. Acfield, City Engineer and Building Surveyor, Leeds, and Charles Gandy, Chairman of the Society's Executive Committee; "The Regional Committees," with papers by representatives of the Committees—Dr. Veitch Clark, Dr. Matthew Burn, Alderman D. Adams, M.P., Councillor W. Asbury, Dr. W. M. Frazer and Dr. Johnstone Jervis; and "Education and Smoke Abatement," with a paper by Dr. F. A. Mason of the Board of Education, and a report by the Secretary.

The Conference opened with a reception at the Civic Hall by the Lord Mayor of Leeds, and closed with an enjoyable motor tour by invitation of the Leeds Health Committee. The Presidential Address, by Dr. H. A. Des Voeux, was entitled "Idealism," and was highly appreciated.

The Chairmen at the Conference sessions were Professors R. Whytlaw Gray and J. W. Cobb, of Leeds University, and Councillor Kitson, of the Leeds City Council.

Arising out of the session on Education, it was agreed to prepare special booklets, for the use of school teachers, showing how smoke abatement could be introduced into ordinary lessons in general science, domestic economy and hygiene. The interest of the Board of Education and of many of the principal local educational authorities has been secured, and the booklets are now

in course of preparation, although owing to the pressure of numerous other activities during the year there has been unavoidable delay in completing them.

Conference in London.

With a view to stimulating interest in smoke abatement in the London area and ascertaining if support would be given by local authorities to the formation of an Advisory Regional Committee for the Greater London area, the Society convened a meeting which was held, by permission of the London County Council, in the County Hall, on 25th February, 1938. The Right Hon. Lord Snell, Chairman of the L.C.C., was in the chair, and representatives attended from the County Councils of London, Essex and Middlesex, the City of London, twenty-five Metropolitan Boroughs, twenty other Boroughs, and nine Urban District Councils. The Minister of Health was represented by the Chief Inspector of Akali, etc., Works, Mr. W. A. Damon.

The chief speakers were Dr. J. S. Owens, Mr. E. H. Keeling, M.P., Mr. W. A. Damon, and Mr. W. R. Hornby Steer. After the opening paper by Dr. Owens, on the present position and trends of atmospheric pollution in Greater London, Mr. Keeling spoke and proposed the following resolution:

“That this meeting is of the opinion that steps should be taken to promote the formation of an Advisory Regional Smoke Abatement Committee for London and Greater London, and requests the National Smoke Abatement Society to report to the authorities concerned, asking them to agree in principle to the proposal, and to be represented at a further meeting to be convened for the purpose of establishing such a Committee.”

The resolution was seconded by Mr. Hornby Steer, and after a short discussion was unanimously carried.

As a result of this decision a further meeting was called by the Society, and was held, by permission, at the Ministry of Health, on 16th June. Fifty-seven authorities were represented. At this meeting it was formally resolved to establish a Regional Committee to be known as the Greater London Advisory Council for Smoke Abatement. Mr. E. H. Keeling, M.C., M.P., of the Westminster City Council, was appointed Chairman and the Society's Secretary, Mr. Arnold Marsh, was appointed Secretary. The latter appointment, and an arrangement by which the Council is for the present to use the Society's offices at Chandos House, were made as a result of previous discussions and with the approval of the Executive Committee of the Society.

Broadcast Appeal.

The Society was granted permission by the British Broadcasting Corporation to make an appeal in the "Week's Good Cause," on Sunday, 9th February. The appeal was read on our behalf by Dr. Julian Huxley, to whom our appreciation and cordial thanks are due. It created considerable interest, although in comparison with many other such appeals the financial results were not very considerable; £151 was the total received, much in small sums, and including a number of first annual subscriptions for membership. The latter are particularly valuable, as a steady annual income is more desirable than one dependent upon fluctuating donations.

In addition to money, numerous inquiries, complaints, and other indications of interest in the problem were, and continue to be, received.

Poster Competition.

During the year, following the lines of the photographic competition held a year or two ago, a Poster Competition was organised. Much greater interest than had been anticipated was aroused, and over 300 entries were received. The judging was carried out by Sir Laurence Chubb and Mr. E. McKnight Kauffer, the well-known poster artist, and the following awards were made:

1st Prize (£10)	...	Henry W. Collins, London.
2nd Prize (£5)	...	P. V. Chadwick, Braintree.
Prizes of £1 each	...	E. Knight Barnard, West Ewell.
		H. J. Greensmith, London.
		W. McLauchlan, Glasgow.
		F. Stalker Miller, London.
		R. T. Whitworth, Hull.

In addition to these the purchase of other entries is being considered, and it is hoped to print and distribute two or three of the most suitable entries. The prize-winning print is reproduced at the beginning of this report.

The posters were exhibited in the halls of the Housing Centre, Suffolk Street, London, during April; the exhibition being formally opened by Dr. Des Voeux, with Sir Raymond Unwin in the chair, during a gathering at which about ninety members and others were present. Our thanks are due to the Housing Centre for their permission and co-operation in arranging the exhibition.

"The Law of Smoke Nuisances."

The Public Health Act, 1936, and the Public Health (London) Act, 1936, have rendered obsolete the Society's book on the law ("The Law Relating to Smoke and Noxious Fumes," by the late

Randolph A. Glen), and consequently Mr. W. R. Hornby Steer, M.A., LL.B., Recorder of South Molton, who has also succeeded Mr. Glen as Standing Counsel to the Society, was invited to prepare a similar work on the new Acts. This has now been published with the title "The Law of Smoke Nuisances."

The book is based on the previous work, but several new chapters have been added, and its usefulness as a book of reference is increased by the inclusion of the relevant sections of the two Acts and of the Local Government Act, 1933. It has been well reviewed and has a satisfactory sale which is steadily continuing.

Panel of Lecturers.

During the year members of the Society who are accustomed to lecturing were invited to allow their names to be included in a new "Panel of Lecturers." The panel, containing twenty-eight names, with all the necessary particulars of each lecturer, has been printed in pamphlet form, with other information, under the title "Lectures on the Smoke Problem." It is being distributed to organizations likely to be interested, and copies may be obtained on application. The names of other qualified speakers willing to be included in any new edition would be appreciated.

Exhibitions.

The Society has participated in or loaned material to various exhibitions during the year. These included Health Exhibitions arranged by the Central Council for Health Education, to which the Society is affiliated, were held at Kensington (at Messrs. Derry & Toms store), Hammersmith, Harrogate, Blackburn and Preston. A stand was taken also at a Health Exhibition at Coventry. The services of a whole-time assistant for these exhibitions has been secured. The increase in travelling expenses shown in the annual statement of accounts is due to the travelling and subsistence expenses resulting from this arrangement.

Enlarged photographs were presented to the Royal Institute of British Architects for inclusion in their "Health and Sport" Exhibition, which, after being shown in London is now touring throughout the country.

The Branches.

The Scottish Branch held its Annual Conference, which, as usual, was well attended and excellently reported in the Scottish press, in Glasgow, on 17th May. There was a lengthy discussion on the unsatisfactory nature of the report of the Scottish Committee on Oil from Coal, which had rejected all proposals for supplying Scotland with smokeless fuel and increasing the supply of home-produced oil by means of low temperature carbonization processes.

Papers were read also on "The Problem of Outdoor Air Hygiene," by Mr. A. L. Thomson, Chief Sanitary Inspector, Motherwell and Wishaw, and "Public Health Administration and Smoke Abatement, by Dr. A. S. M. Macgregor, Medical Officer of Health, Glasgow. The Annual Report shows that the classes for firemen and boiler attendants, held in Glasgow and Edinburgh, continue to be organised with much success. Thirty-two men enrolled in the Edinburgh class and 147 in the two classes at Glasgow.

The North-Western Branch, formerly the Manchester, Salford and District Branch, has been very active during the year, and has been engaged with a number of public meetings, visits and efforts to increase membership and funds. Much new support has been obtained.

One of the most important features of the work of the Branch, which may be of considerable importance to the movement in general, has been to discuss proposals for the establishment of a smokeless central area in Manchester. On 17th May a deputation from the Branch was received by the Manchester Public Health Committee when these proposals were formally submitted. The Committee has accepted the proposals in principle, and has requested the Town Clerk and Medical Officer of Health to consider the steps necessary to bring them into operation. The matter has been reported more fully in the *Journal*.

The Society's Position.

Now that a full year has passed it is possible to review the effects of the transfer of the Head Offices from Manchester to London. There can be no doubt that in every way this move has been most successful, not only indirectly increasing interest in the work of the Society, in making useful new contacts, and obtaining fresh support, but also in an acceleration of the day-to-day activities at the office—in the numerous minor but cumulatively important matters that cannot be individually recorded. Inquiries of all kinds show an increase, and it is interesting to note that complaints about nuisances have become more numerous than they used to be. Apart from the results of the broadcast appeal, there have been a satisfactory number of new or increased subscriptions, and it is hoped that even more substantial progress may be recorded in the next annual report.

An examination of the annual statement of accounts will show that, in spite of increased expenses arising from the transfer, the financial position has improved, with a larger income, a larger surplus, and an increase in reserves due to returning to the Manchester and Salford Savings Bank the sum of £75, withdrawn because of heavy expenses at the time of the Exhibition at the Science Museum in 1936.

The Society's financial position is satisfactory in so far as its income is steady and dependable, but it still remains at a level which, though gradually rising, makes impossible any real expansion of the campaign in the way that is urgently required. With an income of, say, £3,000 a year—which is little enough in comparison with the opportunities that could be taken for effective work—great differences could be made both in the extent and the nature of the Society's propaganda and other activities. Increased subscriptions may, it is hoped, be received from the industrial organizations and firms that for their own sakes wish to encourage smoke abatement. Such subscriptions are always accepted on the understanding that they do not involve any interference with the policy of the Society, which must continue to maintain an entirely independent position in relation to the means for reducing or preventing smoke. Particularly, however, we shall welcome as new members the many individuals who already share our aims, and who, by a closer contact with our activities, could do much to assist in their realization.

CHARLES GANDY, *Chairman*.

WILL MELLAND, *Hon. Treasurer*.

ARNOLD MARSH, *Secretary*.

(*Note*.—Owing to the postponement of the Annual General Meeting for 1938, as a result of the international crisis in September, this report has been printed, contrary to the usual practice, before it has received the approval of the Annual General Meeting).

SUBSCRIPTIONS AND DONATIONS

for the Year ended June 30th, 1938

Name.	Town	Amount
Acton Corporation		1 1 0
Acworth, A. W.	London	10 6
Acworth, Miss E. A.	London	1 1 0
Acworth, A. B.	London	2 2 0
Adwick Le Street U.D.C.		1 1 0
Affleck & Brown, Ltd.	Manchester.....	2 2 0
Almond, J. C.	Darwen	10 6
Alston, Dr. J. M.	London .	10 6
Altrincham Gas Co.		1 1 0
Anonymous		1 0 0
Armstrong, J.	Hyerres.....	2 2 0
Arning, A. W.	Wilmslow	1 1 0
Ascot Gas Water Heaters, Ltd.....	London	10 10 0
Ashton Bros. & Co., Ltd.	Manchester	2 2 0
Ashton-under-Lyne Electricity Department		1 1 0
Banbury Gas Co.		1 1 0
Barber, S. S.	London	10 6
Barlow, Miss A.	Bolton	10 0
Barlow, Sir Thomas	London	10 6
Barrow, C. F.	Sunderland	10 6
Bath Corporation		1 1 0
Bath Gas Co.		1 1 0
Batley Corporation		1 1 0
Batta, Professor G.	Liege	10 6
Baxendale & Co., Ltd.	Manchester	2 2 0
Beard, E.....	Didsbury	1 1 0
Beard, J. R.	Purley	1 1 0
Beautiful Oldham Society		1 1 0
Beckenham Corporation		1 1 0
Beckwith, J.	London	1 1 0
Bennett, Dr. J.	Warrington	10 6
Bennett, M. J.	Romford	1 0 0
Bethnal Green Corporation		1 1 0
Bibby, Mr. & Mrs. H.	Birkenhead.....	2 0 0
Bibby, J. & Sons	Liverpool	5 0 0
Bingley U.D.C.		1 1 0
Birkenhead Corporation		2 2 0
Birmingham Corporation		5 5 0
Birmingham Corporation Gas Dept.		5 5 0
Blakeley, J.....	Colne	10 6
Bognor Gas & Electricity Co.		1 1 0
Bogomoloff, C. N.	Shanghai.....	10 6
Bolton Field Naturalists Society		10 0
Bolton Corporation		1 1 0
Booth, E. R.	Hull.....	10 6
Bootle Corporation		5 5 0
Bournemouth Gas & Water Co.		2 2 0
Bradford Corporation Gas Department ...		1 1 0
Brakenridge, W. D.	London	10 6
Bray, G. & Co.	Leeds.....	1 1 0
Briggs, C. H,	London	10 6

Name	Town	Amount		
Brighton Corporation	1937	1	1	0
	1938	1	1	0
Brighton, Hove & Worthing Gas Co.....		3	3	0
Brighthouse Corporation		1	1	0
Brighthouse Corporation Gas Committee ...		2	2	0
Bristol Corporation		5	5	0
Bristol Gas Co.		5	5	0
British Coal Distillation, Ltd.	London	1	1	0
British Commercial Gas Association	London	26	5	0
British Electrical Development Assn.	London	100	0	0
British Electrical and Allied Manufacturers' Association	London	5	5	0
British Gas Light Co.....	London	2	2	0
British Medical Association		1	1	0
British Smokeless & Oil Fuels, Ltd.....	London	2	2	0
Brown, G. L.	Bradford	1	1	0
Bullwinkle, C.	Harrogate	10	6	
Burnley Corporation		2	2	0
Burnley Corporation Gas Department ...		1	1	0
Bury Corporation.....		2	2	0
Bury, Miss C.	London	10	0	
Buxton Corporation		1	1	0
Cable Makers' Association	London	10	10	0
Cadbury Bros.	Bournville	2	2	0
Cadbury, Mrs. G. W.	London	1	1	0
Calverley & Horsforth District Gas Co....		1	0	0
Camberwell Corporation		1	1	0
Cambridge University & Town Gas Light Co.....		1	1	0
Cannock District Gas Co., Ltd.		1	1	0
Capper-Johnson, Dr. L.	London	10	6	
Cardiff Corporation		1	1	0
Cardiff Gaslight & Coke Co.		1	1	0
Caroe, W. D.	London	1	0	0
Castleford U.D.C.....		1	1	0
Charringtons	London	10	6	
Cheltenham Gaslight & Coke Co.		1	1	0
Chester Corporation.....		1	1	0
Chester United Gas Co.		2	2	0
Chingford U.D.C.		1	1	0
Chorley Corporation		1	1	0
Clarke, D. K.	London	10	6	
Claye, Dr. E.....	Stockport.....	10	0	
Clayton, R. H.	Didsbury	2	2	0
Clegg, E.	Bradford, 1937.....	10	6	
	1938.....	10	6	
Clevedon Gas Co.		1	1	0
Clinch, H. G.	West Ham	10	6	
Coal Utilisation Council	London	25	0	0
Coke Oven Managers' Association		1	1	0
Commercial Gas Co.		3	3	0
Cooper, Miss I.....	Stockport	10	6	
Coote & Warren, Ltd.	St. Ives	1	1	0
Croydon Gas Co.		5	5	0
Crawfurd, H. E.	London	10	6	
D. & I. Smokeless Fuels (1930), Ltd. ...	London	1	1	0
Darlington Corporation.....		1	1	0

Name.	Town	Amount
Deptford Corporation		1 1 0
Doncaster Corporation		1 1 0
Dudley Brierley Hill & District Gas Co..		1 1 0
Duguid, Mr. & Mrs. S.	Lymm	1 1 0
Dunn, Dr. J. J.	Newcastle-on-Tyne .	10 6
Durham R.D.C.		1 1 0
Ealing Corporation		1 1 0
Easington R.D.C.....		1 1 0
Eastbourne Gas Co.		2 2 0
East Cowes Gas Co.		1 1 0
Edmonton U.D.C.		1 1 0
Elland Gas Co.....		1 1 0
Elsworthy, J. Gordon	Dorking	11 11 6
Evans, Richardson Mrs.	London	2 2 0
Exeter Gaslight & Coke Co.		2 2 0
Failsworth U.D.C.		1 1 0
Falk, Stadelmann & Co., Ltd.	London	1 1 0
Farnworth U.D.C.		3 3 0
Felling U.D.C.		1 1 0
Finsbury Corporation		1 1 0
Fitton, Fred A.	Manchester	10 6
Fletcher, G. H.	Sheffield	10 6
Forster, A. Lindsay	Glasgow	1 1 0
Foss, Mrs. A.	Sevenoaks, 1937	10 0
	1938	10 0
Fox, Frank	London	10 0
Fry, Miss A.	Somerset	10 6
Fry, Miss A. R.	Thorpness	1 0 0
Gandy, Charles	Manchester	5 0 0
Gandy, Mr. & Mrs. H.....	Corbridge	1 1 0
Ganter, D.	Manchester	10 6
Gas Chambers & Coke Ovens Ltd.	London	1 1 0
Gas Consolidation, Ltd.		1 1 0
Gas Light & Coke Co.	London	52 10 0
Gateshead Corporation		1 1 0
General Electric Co.	London	5 5 0
Gerrard, A. Dennis	Manchester	10 6
Glasgow Corporation Gas Dept.		2 2 0
Gloucester Corporation		1 1 0
Gloucester Gas Light Co.		1 1 0
Glover & Main, Ltd.	London	5 5 0
Godalming Gas & Coke Co., Ltd.		1 1 0
Goetze, Sigismund	London	6 6 0
Goodchild, W. C.	Old Colwyn	10 6
Goodeve, Dr. C. F.	London	10 6
Gravesend Corporation		1 1 0
Gt. Grimsby Gas Co.		1 1 0
Gt. Yarmouth Gas Co.....		2 2 0
Greenwich Corporation		2 2 0
Grimsby Corporation		1 1 0
Guildford Gas Light & Coke Co.		2 2 0
Gurney, John	London	5 5 0
Hackney Corporation		1 1 0
Halifax Corporation		2 2 0
Halifax Gas Department		5 5 0
Halifax Electricity Department		5 5 0
Hammersmith Corporation		1 1 0

Name.	Town	Amount
Hancock, A.	Manchester	10 6
Hardy, G. & Co.	Manchester	2 2 0
Harrogate Corporation		2 2 0
Harrogate Gas Co.		1 1 0
Hartlepool Gas & Water Co.		1 1 0
Hay, Dr. J.	Liverpool	0 10 6
Hayes & Harlington U.D.C.		1 1 0
Heanor U.D.C.		1 1 0
Hebden Royd U.D.C.		1 1 0
Hereford Corporation		1 1 0
Herbert, A., Ltd.	Coventry	1 1 0
Herbert, Mrs. N.	Buxton	10 6
Herford, Miss A. A.	Withington	10 0
Herne Bay Gas Co.		1 1 0
Hessle Gas Co.	London	1 1 0
Heston & Isleworth Corporation		2 2 0
Hexham Gas Co.		1 1 0
Heywood Corporation Gas Department ...		1 1 0
Hide, P.	Oxford	10 6
Hoare, A.	London	10 0
Holborn Corporation		1 1 0
Holmes, W. C. Co., Ltd.	Huddersfield	5 5 0
Horder, Lord		10 6
Horwich U.D.C.		1 1 0
Houghton le Spring U.D.C.		1 1 0
Hove Corporation		1 1 0
Howden, J. & Co. (Land), Ltd.	London	1 1 0
Huddersfield Corporation		2 2 0
Hull Corporation		1 1 0
Hulley, K.	Doncaster	10 6
Humphrey, Miss A. M.	Weybridge	12 6
Huntley C. Gordon	Manchester	10 6
Hutchison, Colonel R. T.	Chapel-en-le-Frith ...	10 6
Hutchinson, G. H.	Burton-on-Trent	10 6
Hyde, Mrs. A.	London	1 0 0
Ideal Boilers & Radiators Ltd.	London	5 5 0
Illingworth, S. E.	Weeton	1 0 0
Imperial Chemical Industries Ltd.	London	1 1 0
Institution of Gas Engineers	London	10 10 0
Institution of Heating & Ventilat'g Eng.	London	3 3 0
• International Combustion, Ltd.	London	1 1 0
Ipswich Gaslight Co.		1 1 0
Irlam U.D.C.		1 1 0
Jaffray, F. A.	Salisbury, S. A.	2 0 0
Jast, Mrs. S. L.	London	10 6
Jennison, Mrs. W.	Manchester	1 1 0
Keighley Corporation		1 1 0
Kensington Corporation		1 1 0
Kidderminster Corporation		10 6
Kidsgrave Gaslight Co.		1 1 0
Keeley, R.	Prestwich	10 0
Kirkby in Ashfield U.D.C.		1 1 0
Lacey, S.	London	2 2 0
Lamb, Mrs. H. C.	Manchester	1 1 0
Lambeth Corporation		1 1 0
Lancaster Corporation		2 2 0
Langford, A. S.	Manchester	10 6

Name	Town	Amount
Lapage, Dr. C. P.	Manchester	10 6
Lea Bridge District Gas Co.	Leyton	3 3 0
Lea Recorder Co.	Manchester	2 2 0
Lee, Miss D. C.	Oxford	2 2 0
Lee, Sir Kenneth	Manchester	1 1 0
Leeds Corporation		10 10 0
Leeds Corporation Gas Department		25 0 0
Lees, Miss M.	Oldham	1 1 0
Leicester Corporation		10 10 0
Leicester Corporation Gas Department ...		3 3 0
Leominster Gas & Coke Co., Ltd.		1 1 0
Lessing, Dr. R.	London	1 1 0
Leyton Corporation		1 1 0
Lincoln Corporation		2 2 0
Liptak Furance Arches Ltd.	London	1 1 0
Littleborough Gas Co.		1 1 0
Liverpool Corporation		10 0 0
Liverpool Gas Co.		10 10 0
London & Counties Coke Association	London	1 1 0
London (City of) Electric Lighting Co., Ltd.		2 2 0
London Electricity Supply Association ...		10 10 0
London Power Co.		1 1 0
Long Eaton Gas Co.		1 1 0
Longley, J. A.	London	1 1 0
Low Temperature Carbonisation Ltd.	London	10 10 0
Lowestoft Water & Gas Co.		2 2 0
Ludlow Union Gas Co. Ltd.		1 0 0
Luton Corporation		2 2 0
Luton Gas Co.		2 2 0
Maidstone Gas Co.		1 1 0
Maldens & Coombe U.D.C.		1 1 0
Malzy, A. Junr.	London	10 6
Manchester Corporation		26 5 0
Manchester Electricity Department		2 2 0
Manchester Gas Department		5 5 0
Manager, H. A.	London	10 6
Mansfield Corporation		1 1 0
Margolis, A.	London	10 6
Mather, Capt. L. E.	Newton Heath	1 1 0
Meadowcroft, S.	Bradford	10 6
Melland, B.	London	10 6
Melland, Will.	Manchester	5 0 0
Melland, Mrs. W.	Manchester	1 1 0
Meller, Dr. H. B.	Pittsburgh	10 6
Melton Mowbray Gas Light & Coke Co. ...		1 1 0
Merton & Morden U.D.C.		2 2 0
Middleton Corporation		1 1 0
Mid-Kent Gaslight & Coke Co.		1 1 0
Mirfield U.D.C.		1 1 0
Mitcham Corporation		3 3 0
Monmouthshire and South Wales Coal Owners' Association	Cardiff	50 0 0
Moore, S. H.	Chester	10 6
Morgan, D. & Sons	Cardiff	1 1 0
Morley Corporation		1 1 0
Morrell, C. M.	London	10 0
McDougall, A.	Charlestown	2 2 0

Name	Town	Amount	
McFie, Mrs. M. A.	Cambridge	10	6
McMillan, A. M.	Edinburgh	10	6
McWilliam, Dr. H. H.	Liverpool	10	6
National Gas Council	London	26	5 0
Newcastle-under-Lyme Corporation		1	1 0
Newcastle-upon-Tyne Corporation		5	5 0
Newcastle & Gateshead Gas Co.		1	1 0
Newport (Mon.) Gas Co.		1	1 0
Newton, Lord	London	1	1 0
Newton in Makerfield U.D.C.		1	1 0
Nicholson, Philip B.	Wath-upon-Dearne ...	10	6
North Middlesex Gas Co.		2	2 0
Northumberland & Durham Advisory Regional Smoke Abatement Committee.		5	0 0
Nottingham Corporation		5	5 0
Oldham Corporation		5	5 0
Oldham Gas Department		2	2 0
Osborne, Dr. H.	Salford	1	1 0
Oxford Corporation		2	2 0
Oxford & District Gas Co.		1	1 0
Palmers Travelling Cradle and Scaffold (Manchester) Co.		1	1 0
Parkinson Stove Co. Ltd.	London	2	2 0
Peake, H.	Newark	10	6
Pearson, Dr. S. V.	Mundesley	10	0
Pickston, J.	Brighouse	10	6
Polding, Wm. W.	Wigan	10	6
Pontefract Bros.	Manchester	1	1 0
Poplar Corporation		1	1 0
Portsmouth & Gosport Gas Co.		1	1 0
• Powell, Major General S. H.	Walmer	1	0 0
Power Gas Corporation Ltd.	Stockton-on-Tees ...	1	1 0
Preston Gas Co.		1	1 0
Preston, J. Roger	London	10	6
"Prior" Old Burners Ltd.	London	1	1 0
Pudsey Corporation		1	1 0
Radcliffe Corporation		1	1 0
Radiation Ltd.	London	5	5 0
Radiovisor Parent, Ltd.	London	2	2 0
Rathbone, P. R.	London	10	6
Rawstron, Mrs. G.	London	10	6
Redditch Gas Co.			
Refuge Assurance Co.	Manchester	5	5 0
Rhondda, Lady	London	10	6
Richmond Corporation	Surrey	1	1 0
Robinson, Mrs. B. F.	London	1	1 0
Rochdale Corporation		3	3 0
Rothwell U.D.C.		1	1 0
Rowley Regis Corporation		2	2 0
Royton U.D.C.		1	1 0
Russell, Miss D.	London	10	0
Salford Corporation		1	1 0
Salford Corporation Gas Committee		2	2 0
Sanger, Mrs. A. D.	London	1	0 0
Sanitary Inspectors' Association	London	1	1 0
Scarborough Corporation		1	1 0
Scarborough Gas Co.		1	1 0

Name	Town	Amount		
Scottish Branch N.S.A.S.	Glasgow	3	3	0
Seale, Mrs. I. L.	Prestatyn	10	6	
Severn Valley Gas Corporation Ltd.	London	1	1	0
Shaw, Mrs. G. B.	London	3	3	0
Shaw, Mrs. James.....	Alderley Edge 1937	10	6	
	1938	10	6	
Shaw, Sir Napier	London 1937	2	2	0
	1938	2	2	0
Sheffield Gas Co.		1	1	0
Sheffield, Rotherham & District Smoke Abatement Committee.....		25	0	0
Shipley U.D.C.		1	1	0
Shoreditch Corporation		1	1	0
Shrewsbury Gas Light Co.		1	1	0
Siedler, Dr. P.	Frankfurt A.M.	15	0	
Simon, Sir E.....	Stockport	2	2	0
Smethwick Corporation		2	2	0
Smith, Adams	London	1	1	0
Smith & Wellstood, Ltd.....	London	1	1	0
Smoke Prevention, Ltd.	London.....	1	1	0
Solihull Gas Co.		1	1	0
Southall Corporation		1	1	0
Southampton Corporation		1	1	0
Southampton Gas Light & Coke Co.....		1	1	0
South Eastern Gas Corporation Ltd.....	London	5	0	0
Southend on Sea Corporation.....		1	1	0
Southgate & District Gas Co.....		2	2	0
South Suburban Gas Co.....	London	5	5	0
Southwark Corporation		1	1	0
Spenborough U.D.C.		1	1	0
Spenborough U.D.C. Gas Department	1937	2	2	0
	1938	2	2	0
Stalybridge Corporation		1	1	0
St. Helens Corporation		1	1	0
Stepney Corporation		2	2	0
Stockport Gas Committee.....		2	2	0
Stoke-on-Trent Corporation		5	5	0
Stoke-on-Trent Gas Department		1	1	0
Stourbridge Gas Department		1	1	0
Stretford Corporation		2	2	0
Stretford & District Gas Board		1	1	0
Stroud Gas Light & Coke Co.....		2	2	0
Sturtevant Engineering Co. Ltd.	London	2	2	0
Sunderland Corporation		5	5	0
Sunderland Gas Co.		1	1	0
Swindon United Gas Co.		1	1	0
Swinton & Pendlebury Corporation		2	2	0
Tanner, A. E.	Manchester	2	2	0
Taylor, H. Frankland	Disley	10	6	
Templeman, J. T. S.	Chingford	10	6	
Thomas, J. W.	Manchester.....	10	6	
Tootal, Broadhurst, Lee & Co., Ltd.....	Manchester.....	3	3	0
Toronto Corporation	Canada	1	1	0
Tottenham Corporation.....		1	1	0
Tottenham & District Gas Co.....		5	5	0
Trezise, W. E.....	Tettenhall.....	1	1	0
Trier, F. Newton	London	1	1	0

Name.	Town	Amount
Troup, Lady W.	London	10 0
Turbine Furnace Co., Ltd.	London	1 1 0
Urmston U.D.C.		1 1 0
Uxbridge, U.D.C.		2 2 0
Uxbridge Maidenhead Wycombe & District Gas Co.		1 1 0
Van Der Vord, Miss V. E.	Colwyn	10 6
Voeux, Dr. H. A. Des		2 2 0
Wakefield Corporation		1 1 0
Wakefield Gaslight Co.		1 1 0
Wallasey Corporation		5 5 0
Walsall Corporation		1 1 0
Walthamstow Corporation	1937	1 1 0
	1938	1 1 0
Warrington Corporation		2 2 0
Wandsworth Corporation		1 1 0
Wandsworth & District Gas Co.		5 5 0
Ward, Dr. F. A. B.	London	1 1 0
Warner, A.	London	1 1 0
Waterhouse, Mrs. T. C.	Bakewell	2 0 0
Wednesbury Corporation		10 6
Weelington (Salop) Gas Co.		1 1 0
Wembley U.D.C.		1 1 0
West Bromwich Corporation		1 1 0
West Ham Corporation		1 1 0
Westminster Corporation		3 3 0
Weston-Super-Mare U.D.C.	1937	1 1 0
	1938	1 1 0
Weston-Super-Mare Gas Co.		1 1 0
West's Gas Improvement Ltd.	Manchester	5 5 0
Whipple, Dr. F. J. W.	London	1 0 0
Whiston R.D.C.		1 1 0
Widnes Corporation		1 1 0
Wigglesworth Miss E.	Accrington	15 0
Wilks, Miss H. C.	Colwyn	10 6
Willesden Corporation		1 1 0
Willey & Co., Ltd.	Exeter	2 2 0
Wolverhampton Corporation Electricity Department		1 1 0
Wolverhampton Gas Co.		2 2 0
The Woodall-Duckham Co., Ltd.	London	5 5 0
Wood Green Corporation		1 1 0
Wrexham Corporation		1 1 0
Yeadon & Guiseley Gas Co.		1 10 0
York Gas Co.		10 0 0
Subscriptions and Donations under 10/- ...		10 1 0
Total ...		<u>£1096 4 6</u>

RADIO APPEAL SUBSCRIPTIONS AND DONATIONS.

Name.	Town	Amount
Aitchison, Dr. James	Newcastle	1 1 0
Aitchison, Mrs. J.	Newcastle	1 1 0
Aytourn, C. U.	Edinburgh	10 0
Barnard, Miss H. M.	Newcastle, Staffs.	10 6
Berry, Miss J. A., M.B.	London	10 6
Bagehot, Miss M.	London	10 6
Baker, G. M.	Newcastle	10 6
Beit, Sir Alfred	London	1 1 0
Cellan, Jones Gwynne	Middlesbrough	2 2 0
Coull, B. B.	Peterhead	1 1 0
Courtauld, C. C.	Halstead	15 0 0
Crampton, Miss A.	Sidmouth	0 10 6
Donne-Smith, Mervyn	Surbiton	10 0
Elwell, Mrs. E.	Mirfield	10 6
Foakes, Miss N.	London	10 6
Foster, Mrs. A. F.	Jersey	1 0 0
Fox, H.	Stoke Newington	10 6
Garwood, Mrs.	Croydon	5 0 0
Greenwood, T. A. S.	Guildford	10 6
Harris, Charles	London	1 1 0
Hyland, Alfred	London	10 6
Holford, E. M.	Clapham	10 6
Kennedy, Mrs. B.	London	10 6
Lewin, Miss O. M. S., M.B.	London	10 6
Lister, B. S.	Leeds	1 0 0
Micklethwait, R. G.	Barnsley	10 0
Mill, Dr. L. M. D.	Edinburgh	10 6
Noad, Thos. W.	London	5 0 0
Parkinson, Miss E.	Preston	10 0
Ramsden, R. W.	Zurich	5 0 0
Rogers, Phil.	Bath	2 2 0
Rylands, J. R.	Wakefield	1 0 0
St. George, Miss E. G.	Liverpool	5 0 0
Scott, Park, Dr. S. D.	Glasgow	10 6
Seymour, Mrs. H.	London	1 0 0
Shaftesbury, Lady	Wimborne	10 0
Silburn, Mrs. Ethel.	Aberystwyth	10 6
Smalley, A. E.	Manchester	1 0 0
Snook, Mrs. P.	Papplewick	10 0
Stratton, A. J.	Reigate	1 1 0
Stroud Emeritus Professor H.	Gerrards Cross	10 6
Tatchell, P.	London	10 6
Teale, Mrs. H. F.	Ashington	1 0 0
Thorp, Mrs. Charles	Bembridge	10 0
Wadham, Miss	Chelsea	10 6
Wale, W. H.	Lapworth	2 2 0
Watt, Dr. E.	Edinburgh	1 1 0
Wicksteed, J. H.	Abinger Hammer	10 0
Wigglesworth, A.	London	1 1 0
Wilson, P. G.	Balham	10 0
Woodrow, Mrs. A. M.	East Grinstead	10 6
Yerburgh, Mrs. R. A.	Blackburn	3 3 0
Young, Miss A. C.	Belfast	10 0
Anonymous and under 10/-		77 0 5

£151 7 5

THE NATIONAL SMOKE ABATEMENT SOCIETY

Income and Expenditure Account, for the Year ended June 30th, 1938.

1937		1938		1937		1938		EXPENDITURE		1938	
£	s. d.	£	s. d.	£	s. d.	£	s. d.			£	s. d.
1027	10 4			563	6 11	1096	4 6	Salaries		570	8 4
				68	8 1	151	7 5	Rent, Rates, Gas, Water and Electricity			
72	9 4					85	8 11	Cost of Handbook, less receipts from Advertising		183	2 2
119	14 0			10	5 6	88	14 6	Printing and Stationery			
2	0 11			270	8 9	2	17 10	Exhibition Expenses		279	12 6
								Travelling Expenses (including Exhibitions)			
7	14 5			80	13 4	7	10 0	General Expenses, Postages and Telephone		60	13 10
9	10 10			26	11 3	9	7 8	Prizes for Poster Competition		149	13 0
5	6 2					17	10 7	Furniture and Fittings		20	0 0
2	18 8			165	5 11½			Removal Expenses		23	5 6
								Surplus of Income over Expenditure		177	14 5
£1247	4 8	£1464	9 9	£1247	4 8	£1464	9 9			£1464	9 9

Balance Sheet, June 30th, 1938.

SURPLUS :		INVESTMENTS :	
£	s. d.	£	s. d.
Balance as at June 30th, 1937	1016 3 3½	Commercial Union Assurance Co. Ltd., £25 Stock at Cost	205 11 0
Add Surplus of Income over Expenditure	177 14 5	London, Midland and Scottish Rly. Co., £313 4 per cent. Debenture Stock at cost	279 5 11
	1193 17 8½	Manchester & Salford Savings Bank, Deposit	283 15 5
		Cash in Bank and in Hand June 30th, 1938	768 12 4
			425 5 4½
£1193	17 8½		£1193 17 8½

ABBOTT & SON, Chartered Accountants,
40, South King Street, Manchester.

MEMBERSHIP FORMS

INDIVIDUAL.

*To the General Secretary, National Smoke Abatement Society,
Chandos House, Buckingham Gate, Westminster, S.W.1.*

Kindly admit the undersigned as a Member/an Associate of
the Society. A first Annual Subscription is enclosed, to date
from193.....

Signed

Address in full.....
.....
.....

Minimum Subscription for members
(including Journal) 10/6.
Associate Subscription 5/-.
Life Membership Subscription £25.

COMMERCIAL FIRMS AND AFFILIATED MEMBERS.

(See Constitution, Sections 3 and 4).

*To the General Secretary, National Smoke Abatement Society,
Chandos House, Buckingham Gate, Westminster, S.W.1.*

Kindly admit the undersigned as a member of the Society,
A first Annual Subscription of £ : : is enclosed
to date from193.....

Signed

On behalf of

Address

Representative(s) appointed
.....

Address Communications to { Firm
Minimum Subscription, One Guinea, { Representative.

P.T.O.

DONATION FORM.

*To the General Secretary, National Smoke Abatement Society,
Chandos House, Buckingham Gate, Westminster, S.W.1.*

I enclose £..... as a donation to the Society, and
would be pleased to receive notices, literature, etc., from time
to time. (Delete latter clause if desired).

Signed

Address

To be forwarded to the Society.

BANK ORDER FORM.

To the Manager,

The Bank.

Please pay the sum of £ : : immediately
and on the same date in each succeeding year until further notice,
to the credit of the NATIONAL SMOKE ABATEMENT SOCIETY, with
the District Bank Ltd., 57 Victoria Street, Westminster, S.W.1.

Signed

Address

Date.....193.....

FORM OF BEQUEST.

“I give free of duty to the National Smoke Abatement Society
of Chandos House, Buckingham Gate, Westminster, S.W.1., the
sum of £.....to be applied to the general purposes of the
said Society, and I declare that the receipt of the Treasurer for the
time being shall be a sufficient discharge to my Executors for the
same.”

P.T.O,

ESSENTIAL PUBLICATIONS.

For all concerned with Local Government :

“The Law of Smoke Nuisances,” by W. R. Hornby Steer,
M.A., LL.B.

For all Speakers and Writers :

“The Case Against Smoke.”

For reaching to Public :

“Britain’s Burning Shame.”

For all News and Reports :

“The Journal.”

For a full account of the most recent Conference :

The Proceedings of the Cardiff Conference, 1938.

(See page 7).

The National Smoke Abatement Society



**TENTH
ANNUAL
REPORT
1939-40**

• • FOREWORD • •

In consequence of war conditions and of the unavoidable curtailment of the Society's activities, this report is published in as economical a form as possible, and the usual lists of officers, affiliated associations and representatives, subscribers and publications are omitted. As the Annual Conference of the Society, which should have been held in Blackpool in September is indefinitely postponed, the report has not received the customary approval of the annual general meeting.

Under the probable conditions of modern war it would be useless to attempt to continue in a normal way work such as Smoke Abatement, and reduced activities only will be carried out. The members of the staff are engaged on National Service work, and for the time being, salaries and all other expenditure have been reduced as much as possible.

The Officers, with the support of members of the Council and the Executive Committee, hope to keep the organisation intact and the General Secretary, Mr. Arnold Marsh is prepared to use his spare time for the same purpose, and hopes to maintain contact with all concerned with Smoke Abatement from 94, Manor Green Road, Epsom, Surrey. With his help, it is hoped to issue occasional news and information bulletins.

It will be agreed that it would be disastrous for the Society to become moribund and for the work of the last decade to be in danger of being wasted. It will be unfortunate even if, at the conclusion of hostilities, we are not in the position of being able to start again at least where we had to leave off in September. Incidentally, the period of reconstruction that will follow the war should give many opportunities for ensuring more progressive steps for Smoke Abatement and the efficient utilisation of fuel.

Whatever it is feasible and useful to do will therefore be done. This means expenditure, however economical, and we must if possible build up a reserve in readiness for further work. Therefore an earnest appeal is made to members to continue their subscriptions wherever this is possible. This support will be doing very good service to Smoke Abatement, both now and in the future, by helping the Society to maintain the sound position it has achieved for itself.

CHARLES GANDY,

Chairman, Executive Committee.

TENTH ANNUAL REPORT

for the Year ended 30th June, 1939.

General Review.

The year under review has in many ways been of exceptional interest. The work done and progress made by the Society has fully justified the transference of the offices to London, and apart from more tangible results it can now be seen how the rate of activity has accelerated. There are many indications that the Society is far better known than it was a few years ago and that there is a gratifying extension of public awareness of atmospheric pollution.

In smoke abatement matters outside the Society, the most important has been the statement of the problem, for the first time, as the basis of an extensive national publicity campaign, on the behalf of the smokeless fuels, gas and coke. Although the Society's own propaganda must carefully avoid the advocacy of any particular mediums, it is undoubtedly of value to the movement that the importance of smoke abatement should be stressed, on a scale beyond our own means, in certain forms of advertising. There is little danger that this might tend to associate what is essentially a social movement too closely with a particular industry, for other mediums and methods are now fully associated, in the public mind, with smokelessness and cleanliness. Such developments are indeed inevitable and are to be welcomed as natural consequences of the Society's own pioneering work. Within the limits that are defined by our independent status the Society was able to co-operate in the strictly smoke abatement aspects of this campaign, and such co-operation and advisory services are, of course, available to all who ask for them.

One of the most satisfactory material developments for some time was the decision to use smokeless fuel in 7,000 of the open fireplaces in Government offices in Whitehall during the winter 1938-39. This desirable step forward is largely traceable to the influence of the Society and is part of the new attitude towards smoke abatement that can be seen to be developing in responsible circles. It is understood that the pollution records taken in the vicinity of Whitehall show a definite improvement over the records for similar periods of former years.

Consideration of the proposed smokeless central area in Manchester continues, and it is understood that the absence of

any further official statements is due to the priority and urgency of A.R.P. and allied emergency work.

The Minister of Health, the Rt. Hon. Walter Elliot, M.P. referred to the need for smoke abatement at a luncheon in October, and again at a meeting of the Greater London Advisory Council for Smoke Abatement, in the course of which he paid a tribute to the work of the Society. Other well-known speakers, including on several occasions, the Rt. Hon. Herbert Morrison, M.P., have also dealt with the problem during the course of the year.

Speaking at the 1939 congress of the Royal Sanitary Institute at Scarborough, the Earl of Harewood urged action to remedy the evil of impure air. "Would it be fair to suggest," he asked, "that the public health has suffered almost as much during the past 100 years from dirty air as it has gained from clean water? At any rate, I do submit to you that the physique of growing children cannot be satisfactory so long as that heavy cloud of smoke and filth, which covers our most thickly populated areas, contaminates the air from which they derive their very life."

The comparison of the purity of air and of water was similarly brought out in a leading article in "The Medical Officer," in the course of which it was said:

"It is because our waters have been brought to such a trustworthy state that the Croydon event stood out so dramatically. If there could ever be a time when people drank water as foul as the air they breathe habitually, epidemics of water-borne disease would be permanent and universal and nobody would bother about a few tens of thousands of citizens dying annually from typhoid, or cholera. So, to-day, little attention is paid to the tens of thousands of deaths annually, and the millions who suffer perennially, from respiratory diseases due largely to breathing smoke-laden air. Of course, smoke is not the only cause of respiratory disease, it is not the chief cause; but when we see, as we do, that the respiratory death-rates beat with smoke pollution in their local variations, we must conclude that smoke is a potent cause of respiratory disease and that foul air causes more deaths than foul water."

The article, (reprinted in full in the Spring, 1939, issue of SMOKELESS AIR), continues by saying that "The National Smoke Abatement Society is doing all it can, but the vested interests against it are so powerful that in face of an apathetic public it cannot do a tithe of what it would do."

There do not appear to be any especially important developments in the work of the Regional Committees, although much useful work has been recorded. The arrangements for the

establishment of a statutory Joint Board in place of the existing Manchester and District Advisory Committee appear to have been completed, but again the final decisions have been delayed as a result of A.R.P. work among the authorities concerned. Twenty-two authorities have so far agreed to become members of the Joint Board.

The new committees in Bristol and District and Greater London have now been fully established and have set to work.

The Atmosphere.

The latest report on the Investigation of Atmospheric Pollution is published in a new form. The detailed general deposit tables are published as a supplementary volume, which enables the main report, containing the more important tables, etc., to be sold at the reasonable price of 2/-. The page size of both volumes has been reduced to medium octavo. It is hoped that these changes will encourage the wider distribution and study of the report.

The deposit records show that the tendency to improvement is continued: 55 stations record a decrease of total solids over previous years, while only 9 record an increase. 36 show "no change." Cardiff again records no "Z" or smoke-haze days in the winter months, whereas 65 per cent. of the days were "Z" days at Greenwich, 59 per cent. at Stoke-on-Trent, and 54 per cent. at Victoria Street, S.W.1. The intensive survey at Leicester continues, but no report of the work being done or results obtained, is yet available.

Cardiff Conference.

The annual conference of the Society, to be held in Cardiff by invitation of the Lord Mayor and Corporation of that city, had at the last moment to be postponed from the original dates in September because of the international crisis that actually reached its climax on the day the conference should have opened. It was, however, possible to make new arrangements for later in the year, and the conference, successful in spite of the unusual difficulties, took place on December 1st to 3rd.

The proceedings opened with a visit to the Bargoed Mine of the Powell Duffryn Associated Collieries Ltd., followed in the evening by a reception by the Lord Mayor of Cardiff in the City Hall. The first meeting, on the following morning, dealt with "The Duties and Opportunities of Local Authorities in Promoting Smoke Abatement," in which papers were read by Dr. J. Greenwood Wilson and Mr. S. N. Duguid. In the afternoon, papers were read

on "How South Wales is Assisting Smoke Abatement," Mr. Thomas Dixon dealing with Welsh smokeless coals, Mr. W. Clark Jackson with Gas, Mr. James F. Smith with Electricity, and Col. W. A. Bristow with Low Temperature Carbonisation.

On the Saturday morning the annual general meeting was held, preceded by the Presidential Address by Dr. Des Voeux, and followed by a very full and informative discussion on the problem of burning colliery spoilbanks. A resolution was passed in support of the Bill on this matter then before the House of Commons. The Bill has now been passed through its several stages in Parliament.*

Other resolutions adopted by the conference were on the installation of plant for the prevention of grit emission in the works of Public Utility Undertakers, and on the smokeless operation of plant in premises under the control of local authorities. This resolution is referred to in a later section of this report.

The conference concluded with a luncheon held by invitation of the Monmouthshire and South Wales Coal Owners' Association : a most enjoyable and appropriate ending to the proceedings. The attendance at the conference was about 160.

The chairmen at the two sessions on the Friday were Councillor James Griffiths, Chairman of the Cardiff Public Health Committee, and Professor Ralph M. F. Picken, Professor of Preventive Medicine, Welsh National School of Medicine.

Smokeless Air.

The question of increasing the value of the Society's quarterly *Journal* was considered by the Executive Committee. The *Journal* had been published on behalf of the Society by an outside firm for some years, under an arrangement by which the Society supplied the editorial matter and received the magazine free of charge, the firm obtaining the advertisements and retaining the revenue so obtained. This method, although it had relieved the Society of much responsibility, did not make possible the control that appeared to be essential for the many improvements envisaged ; and it was also recognised that the Society was now in a better position to take full responsibility for the publication and could develop it as an activity that would at least pay its way.

The publication arrangement was accordingly terminated and in March the first issue of the new style magazine, under the title SMOKELESS AIR, made its appearance. The choice of a new title caused some hesitancy, and was finally decided by a ballot

*The Royal Assent was received on 4th August, 1939, and the Bill is now the Public Health (Coal Mine Refuse) Act.

among members. Considerable care was, and is being, taken to produce an attractive publication that will be of interest to all types of member and to potential supporters. Many messages of appreciation have been received, and there is little doubt that the magazine is a much more effective medium for creating and maintaining interest than it was. Mr. Walter Elliott, M.P., Minister of Health, has referred to its "elegance and attractiveness" and a letter from a principal officer of a large U.S.A. coal corporation says that "from the standpoint of specific value of its contents and the attractiveness of its composition, to my personal knowledge, it far outstrips any similar publication in the world."

The advertisements are being maintained and if printing costs and postages alone are taken into consideration a profit is being made in the order of £100 a year.

The editorial and management work for the new magazine is naturally considerably heavier than before, and the advertisements side is, of course, entirely new. The development creates what is essentially a permanent business enterprise within the Society.

Assistant Secretary.

For some time it has been evident that the work of the Society could not easily be continued in an entirely efficient manner without further secretarial assistance, and the production of the first issue of SMOKELESS AIR showed that the new duties and responsibilities involved made this imperative. Hitherto the work at headquarters had been carried out by the Secretary and one secretary-typist.

As a result of an advertisement, over three hundred applications for the post of Assistant Secretary were received, and after most careful consideration Mr. A. T. S. McGhie, LL.B., was appointed. Mr. McGhie, since he began his duties in March, has in every way shown himself to be most suitable for the position. The principal sections of the work for which he is now responsible include Exhibitions and the management of the advertisements for SMOKELESS AIR, in addition to various routine duties.

Smokeless Conditions in Premises of Local Authorities.

The resolution adopted at Cardiff on smoke abatement in the premises controlled by Local Authorities, was as follows :—

"That this Conference of the National Smoke Abatement Society is of the opinion that in addition to all other action to promote smoke abatement, Local Authorities should ensure completely smokeless conditions in all premises under their control, thus setting a valuable example to the rest of the community and giving added force to their other smoke abatement work.

“The Conference is also of the opinion that it would be of value to ascertain the progress already made in securing smokeless conditions in buildings under public control and requests the Executive Committee to make the necessary enquiries for that purpose and to report thereon.”

In view of the considerable amount of A.R.P. and other emergency work being carried out at the present time by Local Authorities, it was considered by the Executive Committee that it would be unwise to send to them a detailed questionnaire on the lines at first contemplated, and accordingly in forwarding the resolution information was asked for only on the following points :

- (1) The number and type of premises which are smokeless, compared with the total number.
- (2) Whether, and to what extent, it is intended to utilise smokeless methods in new and altered premises.

The resolution and enquiry were sent to the larger Local Authorities, and so far over seventy replies have been received. Although the nature of the questions has resulted in information that cannot easily be put into statistical form, sufficient statements have been made to show that the need for smoke abatement in their own premises is fully appreciated by the majority of the authorities who have replied.

Over one-quarter of these have attained smokeless, or virtually smokeless, conditions in all their premises, and another quarter claim to be partially smokeless. The position is not clear with regard to most of the remainder, but only five cannot claim to have any smokeless premises at all, nor to have taken any steps to bring about smokeless conditions. Twelve specifically state that they intend to become wholly smokeless in the future.

Detailed and very interesting replies were received from the three cities of Birmingham, Glasgow, and Manchester, and from these it is possible to prepare an analysis which, if the figures are typical of other towns and cities (as seems to be indicated from the general nature of the other replies) establishes that there is a definite trend towards smokeless conditions, and that this trend is due to an attitude, now widely existent, sympathetic towards smoke abatement. For these three cities particulars are given of the smokelessness or otherwise of 1669 establishments, not less than 1186 of which are completely smokeless. This is 70 per cent. of all premises, and is a figure which is most encouraging, even if it is still open to further improvement.

Publications.

Apart from the new magazine, the Society has, during the year, published the *Proceedings* of the Cardiff Conference, and *Britain's Burning Shame*. The latter, an illustrated publication with a popular appeal, was made possible by the welcome offer of the British Commercial Gas Association to take a number large enough to make such a production feasible. Quantities were sold also to Regional Committees, solid fuel, and electrical interests, and to other bodies. The booklet attracted much attention, and many favourable comments were received. Some adverse criticism came from certain coal trade interests, but such criticism, although regretted, appears to be occasionally inevitable.

A new edition of *The Smokeless Home*—a description of the ways in which domestic smoke abatement can be attained—is being prepared, and also under consideration is a new pamphlet on *Smoke and Health*.

The Branches.

The Scottish and North-Western Branches of the Society show a year of good work, which is recorded in full in their own annual reports. Mr. Ian Robertson has been appointed secretary of the Scottish Branch in place of Mr. A. M. Riddet, who has become Town Clerk Depute for Glasgow.

The North-Western Branch has held several successful meetings and is making stimulating progress. It organised the "Sunlight or Smoke" Exhibition held in the Central Library in June, 1939. This created a great deal of interest, as is shown by an attendance figure of 12,500 during the fortnight in which it was open. A lunch-hour address was given each day and provided opportunity for valuable discussion and questions. Over fifty new members were enrolled at the Exhibition.

Exhibitions.

The most important exhibition during the year was that held in December at the Exhibition Hall at the Charing Cross Underground Station, London, at which striking new material, kindly loaned to us by the Gas Light and Coke Company, was displayed. The exhibition was opened by the Rt. Hon. Herbert Morrison, M.P., and was visited by many thousands of people. Most of this material was also shown at the Building Exhibition, Olympia.

The Society participated in Health Exhibitions at Swansea and West Hartlepool, at which lectures and talks to schoolchildren were given.

New portable material has been prepared and has been used

at Blackburn and at the successful "Sunlight or Smoke" exhibition in the Central Library, Manchester, to which reference has already been made.

Although, as in other departments, progress is hampered by lack of funds, new and more carefully prepared exhibits are being obtained, and it will be possible both to equip stands and to loan exhibits to other bodies, much more effectively than has hitherto been possible. It is hoped that the future may make possible a travelling exhibition that will be continuously in use.

Film Competition.

The Society is co-operating with the monthly magazine, *Home Movies*, in a competition for cinematograph films on smoke abatement. The magazine is providing the publicity required, and the Society will award the prize money (totalling £40) and will have full use of the films entered. The closing date is not until towards the end of the year, so that it is at present only possible to say that the number of requests for information on the subject show that the competition is creating interest among amateur cine-workers throughout the country.

Income and Appeals.

New responsibilities have been entered into by the Society, and it is essential that the annual income shall at least continue to show the steady rise that has marked each year's working during the past decade. The income and expenditure account for the present year will show that the position is so far, satisfactory, but it will be apparent that until the annual income is substantially higher than it is now it will not be possible to embark upon the many new schemes for extending our work that are now, in all respects other than this, ready to be started.

To enable the Society to carry out its functions as to-day it can be seen they should be carried out, an income of at least £5,000 a year is required. Our records of what has so far been done on very limited resources are perhaps the best proof that larger sums would be wisely and profitably expended.

Appeals for further funds are therefore being made or prepared : on the one hand to industrial interests to whom smoke abatement is admittedly a business matter, and on the other hand to individuals to whom it is a social reform. So far there have been some successes and some disappointments, but the work has been seriously delayed and has been the cause of much uncertainty owing to the very difficult circumstances of the present time. It is clear that adequate

attention will not be given to appeals of this nature during periods of international tension, and this factor in particular rules out any immediate appeal to local authorities.

There is little doubt that, if the outcome of the present abnormal situation were to be war, the work of the Society would have to be suspended for the time being. It is felt, however, that present difficulties, real though they are, should not be allowed to interfere unduly with our efforts to continue and improve upon the progress that has been made during the present and previous years, and it is earnestly hoped that before long conditions will be much more favourable to the prosecution of a work that will undoubtedly be of lasting benefit to the nation and its people.

CHARLES GANDY, *Chairman.*

WILL MELLAND, *Hon. Treasurer.*

ARNOLD MARSH, *General Secretary.*

July, 1939.

THE NATIONAL SMOKE ABATEMENT SOCIETY.

Income and Expenditure for the Year ended June 30th, 1939.

Year Ended June 30th				Year Ended June 30th			
1938.		INCOME		1938		EXPENDITURE	
£	s. d.	£	s. d.	£	s. d.	£	s. d.
1096	4 6	Subscriptions.....	1195 18 0	570	8 4	Salaries	703 14 2
151	7 5	Radio Appeal	—	183	2 2	Rent, Rates, Gas, Water & Heating...	197 9 11
85	8 11	Sale of Literature.....	60 18 3	279	12 6	Printing and Stationery	241 3 5
88	14 6	Conference Fees	52 9 6	60	13 10	Travelling Expenses (including Exhibitions)	70 5 1
2	17 10	Repayment of Income Tax	20 0 8	149	13 0	General Expenses, Postages and Telephone	150 4 5
7	10 0	Dividends from Investments, etc. :		—		Printing "Britain's Burning Shame," (less Sales receipts)	47 14 11
9	7 8	Commercial Union Assurance Co. ...	7 7 3	—		Printing "Smokeless Air" (less receipts from adverts.)	29 16 6
5	8 4	London, Midland & Scottish Rly. Co.	9 1 6	20	0 0	Poster Competition	—
17	10 7	Interest, M. & S. Savings Bank	6 19 1	23	5 6	Furniture and Fittings	—
—		Sundry Receipts	50 15 6	177	14 5	Surplus of Income over Expenditure	—
		Excess of Expenditure over Income	36 18 8				
£1464	9 9		£1440 8 5	£1464	9 9		£1440 8 5

Balance Sheet, 30th June, 1939.

SURPLUS				INVESTMENTS :			
Balance as at June 30th, 1938.....		£	s. d.	Commercial Union Assurance Co. Ltd.,		£	s. d.
Less Excess of Expenditure over		1193	17 8½	£25 Stock at Cost.....		205	11 0
Income		36	18 8	London, Midland and Scottish Rly. Co.,			
		—	1156 19 0½	£313 4 per cent. Debenture Stock at cost.....		279	5 11
				Manchester & Salford Savings Bank, Deposit		290	14 6
				Cash at Bank and in Hand			775 11 5
							381 7 7½
							£1156 19 0½

NATIONAL SMOKE ABATEMENT SOCIETY.

President : H. A. DES VOEUX, M.D.

Chairman : CHARLES GANDY.

Hon. Treasurer : WILL MELLAND, M.A., J.P.

Hon. Advisory Secretary : SIR LAWRENCE CHUBB.

Standing Counsel : W. R. HORNBY STEER, M.A., LL.B.

General Secretary and Editor : ARNOLD MARSH, M.Sc.Tech., M.Inst.F.

Assistant Secretary : A. T. S. MCGHIE. LL.B.

CENTRAL OFFICES (during the war period) :

94 MANOR GREEN ROAD, EPSOM, SURREY.

Phone : Epsom 1867.

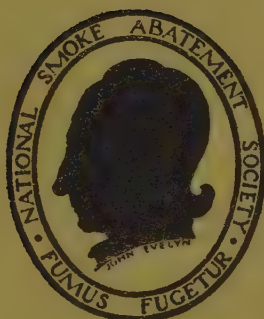
SCOTTISH BRANCH - CITY CHAMBERS, GLASGOW.

NORTH-WESTERN BRANCH : 1b COOPER STREET.

MANCHESTER, 2.

11TH

**ANNUAL
REPORT**



**NATIONAL
SMOKE ABATEMENT
SOCIETY**

1941

ELEVENTH ANNUAL REPORT

of the

National Smoke Abatement Society

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1941

Temporary Address :

WOODBOROUGH, NOTTINGHAM

National Smoke Abatement Society

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Standing Counsel : W. R. HORNBY STEER, M.A., LL.B.

General Secretary and Editor : ARNOLD MARSH, M.Sc.Tech., M.Inst F.

Vice-Presidents :

The Rt. Hon. the Earl of Stamford.	Sir Leonard Hill, M.B., F.R.S., LL.D., Hon. A.R.I.B.A.
The Rt. Hon. the Viscount Cecil of Chelwood.	Sir Pendrill Varrier-Jones, M.A. (Cantab.), F.R.C.P.
The Rt. Rev. the Lord Bishop of London, P.C., K.C.V.O., D.D.	Sir George Newman, G.B.E., K.C.B., M.D., LL.D.
The Rt. Hon. Lord Newton, P.C.	Sir John Robertson, C.M.G., O.B.E., M.D., B.Sc.
The Very Rev. the Dean of Canterbury.	Sir Napier Shaw, Sc.D., F.R.S.
Sir Thomas Barlow, Bart., K.C.V.O., F.R.S.	Sir Ernest Simon.
Sir Francis Freemantle, M.D., M.Ch., D.P.H., D.L., M.P.	Dr. J. Johnstone Jervis, M.D., D.P.H.
Sir Henry Gauvain, M.A., M.D., M.Ch. (Cantab.), F.R.C.S.	Alderman H. J. Maggs, J.P.
Sir Richard Gregory, Bart., F.R.S.	Coun. W. Brownhill Smith, M.V.O., O.B.E., D.L.
Sir Arthur Hill, K.C.M.G., Sc.D., D.Sc., F.R.S.	Peter Fyfe.

Elected Members of the Council :

Mrs. M. A. Cloudesley Brereton.	Dr. H. Osborne, M.D., M.R.C.S.
The Rt. Hon. the Viscount Doneraile.	Major General S. H. Powell.
Dr. Margaret Fishenden, D.Sc., F. Inst. P.	Professor C. H. Reilly, O.B.E., M.A., F.R.I.B.A.
A. Lindsay Forster.	
Sir Francis Goodenough, C.B.E.	

Executive Committee :

Alderman David Adams, J.P., M.P.	Dr. J. Johnstone Jervis, M.D., D.P.H.
Councillor W. Asbury, J.P.	Dr. R. Lessing, Ph. D., F.I.C., M.I.Chem.E., F.Inst.F.
Dr. J. R. Ashworth, D.Sc.	Alderman J. Lynch.
J. W. Beaumont, M.R.S.I.	Dr. W. R. Martine, M.B.E.
Mrs. Broughton.	A. McCulloch, M.Sc. Tech.
Dr. R. Veitch Clark, M.A., B.Sc., M.B., Ch.B., D.P.H.	Alderman W. Muirhead.
R. H. Clayton, B.Sc.	I. Priestley, M.R.S.I., F.R.S.A.
L. H. Dibblin, F.S.I.A.	A. Ritchie, M.B.E., F.R.S.I.
Miss M. Fitzgerald.	J. A. Robinson, F.S.I.A.
Dr. W. M. Frazer, M.D., M.Sc., D.P.H.	Dr. E. W. Smith.
Charles Gandy.	A. E. Tanner.
A. L. Holton.	Dr. E. H. Walker, M.B., Ch.B., D.P.H.

Scottish Branch Representatives :

Ex-Bailie W. Brownhill Smith, M.V.O., D.L.
Ian Robertson.

Coun. Alex Munro.

Affiliated Societies and Representatives Appointed to the Council :

British Medical Association—

Dr. G. Clark Trotter, M. Bishop
Harman, LL.D., F.R.C.S.

Coke Oven Managers' Association—

F. White, J. Cappy.

Institute of Fuel—

Institution of Electrical Engineers—

H. C. Lamb, C. D. Taite.

Institution of Gas Engineers—

D. Cleave Cross, E. Crowther.

Institution of Heating and Ventilating Engineers—C. Ingham Haden,
A. C. Pallot, M.B.E.

Sanitary Inspectors' Association—

T. E. Birtwistle, F.S.I.A.

Society of Medical Officers of Health

Dr. Cyril Banks, M.D., B.S., D.P.H.,
Dr. J. Johnstone Jervis, D.P.H.

Affiliated Local Authorities and Representatives Appointed to the Council :

Acton.—M. W. Kinch, J. J. Jenkins.

Adwick - le - Street.—Councillor T.
Bowater, Councillor J. B. Fuller.

Bath.—

Batley.—

Bethnal Green.—

Bingley.—W. E. Cooke.

Birkenhead.—

Birmingham.—Councillor Brosch, Dr.
W. R. Martine (Executive).

Bolton.—Chairman, Health Committee.

Bootle.—Councillor Dr. I. Harris, Dr.
F. T. H. Wood, O.B.E.

Brighouse.—Alderman B. Asquith,
Mr. C. R. Moss.

Brighton.—Alderman H. M. Black,
J.P., Chairman of Health Committee.

Bristol.—Alderman J. J. Milton, J. A.
Robinson, F.S.I.A. (Executive).

Burnley.—Mrs. Councillor Clitheroe,
Alderman Lynch (Executive).

Bury.—Councillor Hartley.

Buxton.—W. O. Coates.

Camberwell.—Alderman A. F. Cross-
man.

Cardiff.—Councillor J. Griffiths, J.P.,
Dr. J. Greenwood Wilson, M.D.,
M.R.C.P., D.P.H.

Castleford.—Councillor A. Pickersgill.

Chester.—

Chingford.—Chairman of Public Health
Committee.

Chorley.—Alderman Arnold Gillett,
Councillor T. Hamer.

Darlington.—Alderman A. J. Best,
Councillor P. Harrison.

Deptford.—Chairman of the Public
Health and Housing Committee,
Dr. F. L. Keith, M.D., Ch.B.,
D.P.H., L.D.S.

Doncaster.—Councillor T. Gilber-
thorpe, Dr. R. Watson, M.A., M.B.,
B.Ch., D.P.H.

Durham.—

Ealing.—Dr. Thomas Orr, M.D., D.Sc.

Easington.—Councillor W. Luke, J. J.
Waring, Clerk of the Council.

Edmonton.—Councillor J. Reid,
Councillor C. E. Berridge.

Failsworth.—Councillor H. Crossley,
J.P., Councillor H. McAnulty.

Farnworth.—Councillor J. Seddon.

Felling.—Councillor W. S. Greenhaff,
R. J. McLaren.

Finsbury.—Councillor W. Barrie, Dr.
N. D. Dunscombe.

Fulham.—

Gateshead.—

Gloucester.—Dr. Charles Cookson, M.D., D.P.H.

Gravesend.

Greenwich.—Councillor R. G. Jagers, Councillor Mrs. Ada Kennedy.

Grimsby.—

Hackney.—Councillor Mrs. C. Gooch, Councillor F. H. White.

Halifax.—Dr. C. G. F. Roe, M.R.C.P. L.R.C.S., L.M., D.P.H., D.P.M., J. W. Beaumont, M.U.S.I. (Executive).

Hammersmith.—Councillor Mrs. E. Cox, Councillor Miss J. Bourne.

Harrogate.—Councillor W. F. W. Rhodes.

Hayes and Harlington.—Councillor L. M. Graves, J.P., C.C., Councillor D. Page.

Heanor.—

Hereford.—

Heston and Isleworth.

Holborn.—Councillor A. R. Tylour, M.A., Dr. J. A. Struthers.

Horwich.—James Seddon, Councillor W. S. Roskelly.

Houghton-le-Spring.—

Hove.—Councillor A. H. Clarke, Dr. N. E. Chadwick, M.A., M.D., D.P.H. (M.O.H.)

Huddersfield.—

Hull.—Alderman W. Turner, Councillor E. Chapman.

Irlam.—Councillor J. G. Enticott, J.P., L. F. Atherton.

Keighley.—

Kensington.—

Kidderminster.—Coun. J. Andrews.

Kirkby-in-Ashfield.—

Lambeth.—Councillor W. J. Geary, Dr. A. G. G. Thompson, M.A., M.D., D.P.H.

Lancaster.—Councillor W. M. Simpson, Dr. J. D. Buchanan, M.B., D.P.H.

Leeds.—Dr. J. Johnstone Jervis, M.D., D.P.H. (Executive), C. H. Manley, M.A., F.I.C.

Leicester.—Alderman Parbury.

Leyton.—Alderman J. B. Shimmin, B.Sc., Councillor E. A. Rigg.

Lincoln.—Dr. Mohan Lal Bery, M.B., Ch.B., D.P.H., D. G. McGill, M.S.I.A.

Liverpool.—Alderman W. Muirhead (Executive), Dr. W. M. Frazer, M.D., M.Sc., D.P.H. (Executive).

Luton.—Councillor W. G. Roberts, Dr. F. Grundy, M.D., M.R.C.S., D.P.H.

Malden and Coombe.—H. Tunbridge, M.R.San.I., Alderman E. E. W. Manning.

Manchester.—Alderman W. T. Jackson, Councillor T. M. Larrad, Dr. R. Veitch Clark (Executive).

Mansfield.—

Merton and Morden.—Councillor S. Le Gros Clark, J. B. Pointon.

Middleton.—Chairman, Health Committee, Dr. S. T. Beggs, M.D., M.B., B.S., B.A.O., D.P.H.

Mirfield.—Councillor A. Kilner, Councillor Hallas Lockwood.

Mitcham.—Councillor H. Richards.

Morley.—

Newcastle-under-Lyme.—C. A. Wood, M.S.I.A., M.R.San.I.

Newcastle-upon-Tyne.—Councillor W. Thompson, Alderman David Adams, J.P., M.P. (Executive).

Newton-in-Makerfield.—

Nottingham.—Dr. Cyril Banks, M.D., Alfred Wade.

Oldham.—Councillor S. T. Marron, Dr. J. T. C. Keddie.

Oxford.—Stewart Swift.

Poplar.—Alderman J. H. Jones, Councillor H. Boulton.

Preston.—Alderman R. Durham.

Pudsey.—Councillor J. T. Pickard.

Radcliffe.—

Richmond (Surrey).—Dr. C. S. Brebner, M.D., D.S.O., George Laws.

Rochdale.—Dr. J. Innes, M.D., D.P.H., Chairman of Sanitary Sub-Committee.

Rothwell.

Royton.—Councillor T. H. Lowe, Ellis Harrison.

Rowley Regis.—Councillor A. H. Hancock, Dr. F. Asker.

Salford.—

Scarborough.—Alderman Bielby, Dr. S. Fox Linton.

Sheffield, Rotherham and District Smoke Abatement Committee.
Councillor W. Asbury, J.P. (Executive), James Law.

Shipley.—

Shoreditch.—Councillor Mrs. D. Thurtle, Dr. E. H. R. Smithard, M.D., D.P.H.

Smethwick.—Alderman C. G. Kemp-ton, Councillor E. W. Perry.

Southall.—Dr. E. Grundy, I. A. Stephenson.

Southampton.—

Southend-on-Sea.—Chairman of the Sanitary Committee.

Southwark.—Councillor H. Stillman, Dr. W. Stott, M.B., B.S., D.P.H.

Spenborough.—

Stalybridge.—Alderman Potts, Councillor G. Leigh.

Stepney.—Councillor J. J. A. Long, Councillor Mrs. Frankel.

St. Helens.—Alderman T. Hamblett, J. P., Dr. F. Hauxwell, M.B., Ch.B., D.P.H.

Stoke-on-Trent.—

Stretford.—Councillor H. Lord, Dr. E. H. Walker, M.B., Ch.B., D.P.H. (Executive).

Sunderland.—Councillor G. Potts, Dr. A. S. Hebblethwaite.

Swinton and Pendlebury.—Alderman J. Bradley, J.P., Dr. A. E. Wall.

Tottenham.—Councillor A. R. Turner, Medical Officer of Health.

Urmston.—

Uxbridge.—Councillor T. R. Thirtle.

Wakefield.—Chairman, Health Committee.

Wallasey.—Dr. R. B. Berry, Alderman D. P. Charlesworth.

Walsall.—C. A. Stansbury.

Walthamstow.—M. E. Duncan.

Warrington.—Alderman David Plinston, J.P., Dr. Stuart F. Allison.

Wednesbury.—

Wembley.—Councillor E. H. Everett, R. M. Turner.

West Bromwich.—Councillor J. T. H. Davies, J.P.

West Ham.—Councillor Mrs. A. A. Barnes, H. G. Clinch.

Weston-Super-Mare.—

Westminster.—Councillor Mrs. Alderson Horne, Dr. A. J. Shinnie, M.D., D.P.H.

Whiston.—

Widnes.—Councillor T. Smith, Councillor E. Hesketh.

Willesden.—L. H. Dibblin (Executive).

Wolverhampton.—Dr. R. H. H. Jolly, M.D., D.P.H.

Wood Green.—Alderman E. J. Ander-ton.

Wrexham.—Councillor Mrs. C. Jones, Councillor E. S. E. Hackett.

Local Authorities affiliated to the Scottish Branch :

Airdrie, Clydebank, Coatbridge, Dumbarton, Dundee, Edinburgh, Falkirk, Glasgow, Greenock, Hamilton, Irvine, Johnstone, Kirkcaldy, Kirkintilloch, Mother-

well and Wishaw, Paisley, Port Glasgow, Rothesay, Rutherglen, Stirling, County Councils of Ayr, Dunbarton (Western District), Lanark, Renfrew.

Information Concerning the Society

The National Smoke Abatement Society was formed in 1939 by the amalgamation of the Coal Smoke Abatement Society (1899) and the Smoke Abatement League of Great Britain (1909). It is an organisation dependent entirely upon voluntary support, and its objects and conditions of membership will be found in the Constitution, on another page.

Offices—Central (General Secretary's) Offices : Temporary Address : Woodborough, Nottingham.

Scottish Branch : City Chambers, Glasgow.

North-Western Branch : 1b, Cooper Street, Manchester.

Lectures, Lantern Slides, Exhibits, etc.—Normal services are at present largely in abeyance, but inquiry is welcomed and every effort will be made to co-operate in any arrangements that it may be desired to make.

Posters.—The following posters are available : Slogan posters, 30 in. by 20 in. (four kinds), at 4d. each. Large pictorial posters, five in set, for use on ex-E.M.B. frames, at 7/6 per set. New photo-colour poster, 30 in. by 30 in. at 6d. each.

Information and Advice.—The Society is glad, at any time, to be of assistance to any person requiring information on smoke abatement and related matters. Inquiries should be addressed to the General Secretary, N.S.A.S., Woodborough, Nottingham.

Honorary Advisers :

ATMOSPHERIC POLLUTION.—Sir Napier Shaw and Dr. J. S. Owens.

HEALTH.—Sir Leonard Hill and Professor P. S. Lelean.

STEAM RAISING PROCESSES.—Messrs. J. B. Jones, E. W. L. Nicol and H. L. Pirie.

METALLURGICAL PROCESSES.—Mr. E. C. Evans.

DOMESTIC HEATING.—Dr. Margaret Fishenden.

GAS INDUSTRY.—Dr. E. W. Smith.

ELECTRICAL INDUSTRY.—Mr. A. P. M. Fleming.

HON. AMERICAN CORRESPONDENT.—Dr. H. B. Meller, Pittsburgh.

PUBLICATIONS *of the* NATIONAL SMOKE ABATEMENT SOCIETY.

Smokeless Air. The Society's quarterly Journal. Regular publication is being maintained though the size has temporarily been reduced. The only magazine in the world devoted to the problems of atmospheric pollution. Gratis to members or 2/6 per annum, post free.

The Law of Smoke Nuisances. By W. R. Hornby Steer, M.A., LL.B., Recorder of South Molton, Standing Counsel to the Society. This book, based on an earlier work by Randolph A. Glen and revised and extended in accordance with the Public Health Acts of 1936, is likely to be accepted as a standard work on the subject. In addition to the explanatory chapters it contains tables of statutes and cases and the relevant sections from the two Acts and the Local Government Act, 1933. 8vo., 65 pages. 1/- paper-backed ; 2/6 cloth-bound.

The Case Against Smoke. A booklet which is intended to give the reader a clear understanding of the nature and extent of the smoke nuisance by means of passages from a number of writers and speakers, each of whom may be regarded as an authority in his own sphere. There are also figures and extracts from official reports and tables. 24 pages, 4to. Price 3d.

Science Museum Exhibition :

Handbook. This is not only a detailed guide to the Exhibition, but, containing a series of twelve authoritative articles on the main aspects of the problem, is a permanent and useful reference book. 80 pages, medium 8vo. Price 6d.

Conference Report. The most complete review of the problem to be published for many years. Twelve papers and discussions in full. 116 pages, 4to. Price, 2/-.

Fumifugium : or the Smoake of London Dissipated. By John Evelyn. This rare and fascinating book, first published in 1661 by command of Charles II, has been republished by the Society with an introduction by Rose Macaulay. In spite of its age this indictment of the smoke evil by the author of the famous Diaries remains true, witty, and penetrating. Illustrated with original wood engravings and a portrait of Evelyn. Paper covers, 6d. Cloth-bound 1/6.

Smoke and Fumes Nuisances from Road Vehicles. The technical and scientific aspects by Dr. J. S. Owens, A.M.Inst.C.E., M.I.Mech.E., and the legal position by R. P. Mahaffy, M.A. 16 pages, 8vo. Price 3d.

Smoke and Aviation. Full report of a special conference on this subject. Four papers and discussions. Illustrated. 40 pages, 8vo. Price 6d.

The State of the Atmosphere. A distinctive and valuable survey of the problem by an eminent architect, the late Sir Frank Baines, K.C.V.O., C.B.E., F.R.I.B.A. Royal 8vo., 36 pages. Price 6d.

Smoke Abatement and Fuel Economy. In steam boiler practice. Published by the Manchester and District Regional Smoke Abatement Committee. 12 pages. Price 1d. By post 2d.

Britain's Burning Shame. This pamphlet has been described in a review as "a masterpiece of modern popular propaganda." It puts the smoke problem in its simplest terms, especially as it affects the home, and is profusely illustrated. Single copies, 2d. 12/6 per 100.

Conference Proceedings. Copies are available at 1/- each of the full reports, containing papers and discussion of conferences held in 1932, 1934, 1937, and 1938.

Constitution of the Society.

1. **NAME.**—The Society shall be called the National Smoke Abatement Society.

2. **OBJECTS.**—The Society shall be concerned with the prevention of air pollution generally, and in particular, that arising from coal smoke.

The objects of the Society shall be :—

- (a) To create an informed public opinion on the evils of air pollution.
- (b) To inquire into, and if thought advisable, assist investigations directed towards the abolition of smoke, whether industrial or domestic.
- (c) To take steps to popularize the use of smokeless methods of heat and power production.
- (d) To promote and support legislation for preventing the pollution of the atmosphere.

3. **MEMBERSHIP.**—The Society shall consist of :—

- (a) Life Members.
- (b) Members.
- (c) Associates.
- (d) Affiliated Members.

Life Members.—A donation of not less than twenty-five guineas paid in one amount by any individual, shall constitute the donor a member for life.

Members.—An Annual Subscription of not less than half a guinea in the case of an individual, or one guinea in the case of a commercial firm, shall constitute the subscriber a member. A commercial firm registered as a member shall be entitled to nominate a representative to exercise the privileges of membership as regards attendance at meetings, voting, etc.

Associates.—An Annual Subscription of not less than five shillings shall constitute the subscriber an Associate.

Affiliated Members.—The payment of not less than one guinea by any Local Authority, Society or Institution, shall con-

stitute the subscribing body an Affiliated Member. The affiliated Member shall be entitled to appoint two representatives to the Council of the Society, who shall receive the privileges of full membership of the Society.

4. PRIVILEGES OF MEMBERSHIP.—The privileges of membership shall include :—

- (a) Advice and assistance in questions relating to smoke abatement and fuel economy as far as the circumstances of the Society will permit.
- (b) Free admission to lectures arranged by the Society.
- (c) The right to receive free of cost, the general publications of the Society as they appear, including the Journal of the Society. Associates shall not, however, receive the Journal and such other literature as may be decided upon from time to time.

5. THE COUNCIL.—The Council of the Society shall consist of the Officers, the members of the Executive Committee two representatives from each Affiliated Member, together with not more than thirty members to be elected annually at the General Meeting.

The business of the Council shall be to direct the policy of the Society in general and to receive any periodical reports from the Executive or other committee.

The Council shall meet at such times and places and for such purposes as the Executive Committee shall arrange and shall also be convened on a requisition signed by not less than three of its members stating the purpose for which such meeting is required.

6. THE EXECUTIVE COMMITTEE.—The Executive Committee shall consist of the Officers and not less than twelve members or representatives of Affiliated members, who shall be elected annually at the General Meeting of the Society. The Executive Committee shall have power to appoint sub-committees, and to co-opt additional members. Five shall form a quorum.

The Committee shall meet as required, and the place of meeting shall be at the central offices of the Society, or other place at the discretion of the Committee.

The business of the Committee shall be to manage the affairs of the Society.

7. OFFICERS.—The Officers of the Society shall be President, Vice-President and Honorary Treasurer, to be elected annually. The Chairman of the Committee and of the Council, shall also be Officers, but shall be elected by their respective Committees.

8. **GENERAL MEETING.**—The General Meeting of the Society shall be held annually at which shall be presented the Annual Report and the Audited Financial Statement, and at which the Officers, the Council and the Executive Committee for the following year shall be elected. Other general meetings shall be held on the requisition of the Council or Executive Committee, or of 20 members of the Society. One month's notice shall be given of all General Meetings.

9. **ALTERATION TO CONSTITUTION.**—No change shall be made in the constitution of the Society, except by a two-thirds majority of the members present and voting at the Annual Meeting or at a Meeting called specially for the purpose. A notice in writing of any resolution to be submitted for this purpose must be sent to all members of the Society at least a fortnight before the Annual or Special General Meeting.

10. **ACCOUNTS.**—Accounts shall be kept of all moneys received and expended by the Society, and once at least every year the accounts of the Society shall be examined and the correctness thereof certified by a qualified auditor.

11. **BRANCHES.**—Branches of the Society shall be constituted, as far as possible, in the town or districts of the United Kingdom, to deal with local smoke abatement and air pollution problems. Branches shall settle their own constitution and terms of membership, but shall pay an affiliation fee of at least sixpence for every individual member and of two shillings and sixpence for every firm affiliated to the National Society, except in the case of members who are also members of the National Society. Members of the Branches who are not also members of the National Society shall be entitled to attend the General and other meetings of the Society, but shall not be entitled to vote thereat. The Branch shall, however, appoint two delegates to the Council of the National Society and to the Annual General Meeting, who shall have full voting powers.

12. **JOURNAL AND LITERATURE.**—A copy of each issue of the Journal of the Society, together with all other current general literature shall be sent free to each member and delegate from each Affiliated member ; to the Town Clerk of each affiliated Local Authority, and to the Secretary of each affiliated Society or Institution.

13. **INTERPRETATION OF CONSTITUTION.**—The interpretation of these rules together with any question on which the rules are silent shall be decided by the Executive Committee until the next Annual General Meeting.

*ELEVENTH ANNUAL REPORT

Smoke Abatement and the War.

When the position of the Smoke Abatement movement at the end of the last war is compared with that immediately before the outbreak of the present war, it is seen that considerable progress was made during the two intervening decades. There was a marked improvement in the condition of the atmosphere during that period, and more especially was there that development in organisation and that focussing of attention upon the problem that had to be made before further and more radical progress could be achieved. Smoke abatement began to be accepted as one of the essential reforms required for the public health and well-being. The work on the Investigation of Atmospheric Pollution was taken over by the Department of Scientific and Industrial Research ; new legislation accompanied the setting up of Regional Committees of Local Authorities at the recommendation of the Ministry of Health ; and many developments in the domestic and industrial uses of fuel, together with the production of new types of fuel, began to make possible the ideal of a completely smokeless Britain. The National Smoke Abatement Society, formed by the union of two older organisations, was placed upon a sound basis and was steadily extending its activities and influence.

The outbreak of the present war brought this fruitful period to an end. Under the stringency of modern war conditions it is inevitable and necessary for that which is less urgent to stand aside for that which is more urgent, and it was at first feared that circumstances might force the Society into a more or less moribund condition. Fortunately, although enterprise has had to be limited, it has been found possible to maintain activity.

Government departments and Local Authorities are now fully occupied with graver tasks, and the Society alone is in a position to maintain smoke abatement as an organised and effective force, in touch with all related interests and developments, both here and overseas, and prepared for the many opportunities that will undoubtedly present themselves during the period of reconstruction that will follow the end of hostilities. It would be a serious misfortune if, instead of then making important progress, the time had to be spent in rebuilding and redeveloping the movement.

The Society must therefore not merely seek to prevent itself

* The report is strictly for the year ended 30th June, 1940, but to give an account of proceedings to date it actually covers the period of 18 months to 30th December, 1940. When normal conditions are restored it may be considered advantageous for the Society's year to coincide with the calendar year.

from becoming weaker, but must exert itself, even to-day, in strengthening itself and making ready for the future. It can take little part in the winning of the war, but it can take its share in the work that has to be done for the winning of the peace. The preparations for that work are already beginning, and it is not too early for smoke abatement to be preparing its own plans that will fit in with the general pattern of reconstruction and post-war development.

It is believed that this need is already understood and appreciated by our members, for the continued support of the majority has already enabled the financial position to be strengthened, and has made it possible for us so far to overcome immediate dangers and to look ahead with confidence.

Wartime Arrangements.

It was at first feared that not only might the war lead to a virtually complete suspension of the Society's activities, but that there might also be a serious decline in income. The most important factor appeared to be the conservation of our resources in readiness for the time when it would be possible to resume normal work, and the three members of the staff therefore agreed to take up other wartime duties. The principal rooms occupied at Chandos House were vacated, and the equipment, records, stocks of publications and exhibition material were stored in the two rooms retained. In this way a substantial reduction in expenditure was quickly achieved.

The Secretary arranged to continue what duties remained in his spare time, working from his home at Epsom, Surrey. Thanks to the unexpected continuation of comparatively normal conditions during the early months of the war, and to the excellent way in which members maintained their support, it became possible to carry out useful, though restricted, work, and to place the organisation upon a more stable emergency footing. The wartime functions of the Society became more apparent, and it was agreed that they could not be effectively carried out by spare time work alone. The Secretary was therefore asked to relinquish the post he had taken at the beginning of the war, and to resume full-time duties. For reasons of economy it was considered advisable to continue the work from Epsom, and further office equipment and records were transferred from Chandos House.

The work to be done during the war is almost entirely carried out by post and through publications and other writing. The address from which it is conducted is immaterial, and it is for reasons of general convenience and security that a further temporary change of headquarters has been recently made to Woodborough, Notting-

ham. The work will be facilitated by this move, and it will be easier to maintain contact with all parts of the country from the more central position.

Conferences.

Arrangements had been completed for the 1939 Annual Conference and General Meeting to be held at Blackpool in September of that year, and a well-attended gathering was anticipated. The proceedings had, of course, to be cancelled upon the outbreak of war.

It has been hoped that it would be possible to hold a general meeting and a short conference during the autumn of 1940, but the situation made it impracticable to proceed with the project.

A meeting of the Council was convened in Manchester on 2nd April, 1940, and to it were invited members of the Society and of its North-Western Branch, together with representatives of the neighbouring Regional Committees.

A paper by Dr. Johnstone Jervis, Medical Officer of Health for Leeds, was read and served as an excellent introduction for a general discussion on the position of smoke abatement in relation to the war. Dr. Jervis said that the Society had the choice of doing nothing, of doing little beyond keeping the machine, so to speak, "ticking over," or of carrying on as actively as possible. The meeting supported him in the view that the last course was desirable, and passed a resolution to the effect that "The Executive Committee be requested to take every practicable step to maintain the work of the Society during the war period."

At a meeting of the Executive Committee held shortly afterwards, the return of the Secretary to full-time duties was approved, and the following comprehensive resolution was adopted :—

"That as the war is developing into a struggle in which economic factors are likely to be of decisive importance, and as there is therefore need to eliminate all forms of waste, the Executive Committee of the National Smoke Abatement Society redirects attention to the gross and expensive waste causing and caused by the smoke nuisance, which may be briefly stated as follows :—

- (1) The waste of fuel and power of which smoke is the direct consequence.
- (2) The waste of money, labour and skill expended in combating the continuous dirt and damage caused by atmospheric deposits.

- (3) The waste of health, well-being and amenity caused directly and indirectly by the polluted air and restricted sunlight of our cities and industrial areas.

“Further, the Society views with anxiety the deterioration in atmospheric conditions that has already occurred since the war began, which, if continued will progressively increase these economic losses.

“The Executive Committee therefore conceives it to be the duty of the Society no longer to restrict its activities and invites the support of Government departments, Local Authorities, and all others interested, in a work that can materially add to the nation's health and economic strength.”

The intensification of the war shortly afterwards, together with other developments preventing any campaign directed against industrial smoke, even on the grounds of fuel economy, has made it difficult to implement this resolution to any marked extent.

Publications.

The cancellation of many of the advertisements at the outbreak of war, together with the uncertain financial future, made it necessary to suspend the publication of the new style quarterly, of which two successful issues had appeared under the title *Smokeless Air*. The greatly improved journal had been widely appreciated, and among other tributes, had been publicly commended by the Minister of Health. Two issues of a small bulletin subsequently appeared, but the later improvement in conditions made it possible for further issues to be improved and made more substantial.

It is hoped to continue the regular publication of this “wartime edition” until peace is restored and the resumption of the more ambitious magazine is made possible. Although advertisement revenue and sales by no means cover the present costs of printing and distribution, it is considered that the cost of continuing the publication is well worth while, as it is for the present the only medium by which contact can be maintained between all those who, in different ways, are concerned with and interested in the problems of air pollution.

Towards the end of 1939 there was published a statement in pamphlet form on “Smoke Abatement in Wartime.” This stressed the continued importance of the question even under a war economy, and maintained that the war effort could be aided by due regard continuing to be given to it, especially on the grounds of health and the prevention of waste. The pamphlet was reviewed with gratifying approval by the technical and medical press.

Other Activities.

Many of the normal minor activities of the Society have been severely curtailed in recent months, and lecturing, exhibitions work and press publicity was naturally at a standstill. Inquiries and requests for information or advice continue to a limited extent, and occasionally there is some question of importance that demands special attention and consultation.

The Society has been co-operating with the Mines Department in its campaign for economy in the domestic use of fuel, and is represented upon an advisory committee of the department and co-operating organisations. Nearly fifty members have agreed to act as lecturers for this campaign at meetings arranged through the Ministry of Information organisation.

This work is more fully described in the Autumn, 1940, issue of *Smokeless Air*, in which reference is also made to the support given by the Society to the successful campaign for the exclusion of books from the new Purchase Tax.

Contacts are maintained with organisations and individuals in the United States of America, which is the only country in which normal smoke abatement work now continues.

Present and Future Work.

The present programme of work has for its first objective the maintenance of the Society in a sound and "wideawake" condition, not only for its own sake but because there can be thus assured the continuation, as a whole, of what may be summed up as the smoke abatement "movement." Without an active focus, such as at present only the Society can provide, the organised knowledge of, and demand for, smoke abatement would have to be laboriously built up again at a time when, by prompt and energetic action, it may be possible to secure very substantial progress.

In addition to *Smokeless Air* it is intended to publish a preliminary survey of the ways in which measures for air purification can appropriately be introduced into the general schemes that are likely to be evolved for post-war reconstruction and development. The health aspects of the problem are basically the most important of all, and a new publication on *Smoke and Health* is also being prepared.

Other aspects of the problem may call for similar attention before long, and it is also apparent that when the time comes for the renewal of full activity and the enlistment of new and wider support, it will be of great value to have available a fully up-to-date and comprehensive text-book on the subject. Although parts of such a book cannot be completed until the post-war conditions can be more

clearly determined, a great deal can be undertaken during the present period of otherwise restricted work, and the project will shortly be commenced by the Secretary.

Meanwhile it is intended to keep in close touch with all discussion and inquiries into the questions of post-war reconstruction and development wherever these have a bearing upon smoke abatement and its related subjects.

Finance.

Reference to the statement of accounts for the year ended 30th June, 1940, will show that up to then the Society's position had continued to be satisfactory, the fall in income having so far been counterbalanced by reduction in expenditure. The reserve funds have not been drawn upon as yet, and every effort will be made to keep them intact in readiness for the increase in expenditure that will have to accompany our post-war work. It is, indeed, even hoped that it may be possible to strengthen these reserves in order to make more certain our ability to meet all possible needs in the future. It is therefore hoped that every member who can possibly do so will continue his usual annual subscription, sharing our confidence that the time is not far distant when the Society will be able to resume more vigorously than before a work only temporarily checked, and to the importance of which full recognition will then be given.

CHARLES GANDY, *Chairman.*

WILL MELLAND, *Hon. Treasurer.*

ARNOLD MARSH, *General Secretary.*

January, 1941.

SUBSCRIPTIONS *and* DONATIONS for the Year ended June 30th, 1940.

Name	Town	Amount £ s. d.		
A cton Corporation.....	1940-41	1	1	0
Acworth, A. W.	London	0	10	6
Acworth, Miss E. A.	London	1	1	0
Acworth, Miss W. B.	London	2	2	0
Adwick-le-Street U.D.C.		1	1	0
Affleck & Brown Ltd.	Manchester	2	2	0
Alston, Dr. J. M.	London	0	10	6
Altrincham Gas Company		1	1	0
Andrew, W. H.	Ashton-under-Lyne ...	0	5	0
Anonymous		1	0	0
Arning, A. W.	Wilmslow.....	1	1	0
Ashwell & Nesbit Ltd.	Leicester	0	5	0
Ashton Bros. & Co. Ltd.	Manchester	2	2	0
Ashton-under-Lyne Electricity Dept.		1	1	0
Atkinson, Mrs. M.	Oxford, 1939	1	0	0
	1940	1	0	0
B aker, G. M.	Newcastle-upon-Tyne	0	10	6
Banbury Gas Company.....		1	1	0
Barber, Stanley S.	London	0	10	6
Barlow, Miss A.	Bolton	0	10	0
Barrow, Chris. F.	Sunderland	0	10	6
Barrow, Harrison	Birmingham	0	5	0
Bath Corporation		1	1	0
Bath Gas Company		1	1	0
Batley Corporation		1	1	0
Baxendale & Co. Ltd.	Manchester	2	2	0
Beard, E.	Manchester	1	1	0
Beard, J. R.	Purley	1	1	0
Beit, Sir Alfred	London	1	1	0
Bennett, Dr. James	Warrington	0	10	6
Bethnal Green Corporation		1	1	0
Bibby, Mr. and Mrs. H.	Birkenhead	2	0	0
Bibby, J. & Sons.....	Liverpool	5	0	0
Bingley U.D.C.		1	1	0
Birkenhead Corporation		2	2	0
Birmingham Gas Department		5	5	0
Rognor Regis Gas & Electricity Co.		1	1	0
Bolton Field Naturalists' Society		0	10	6
Bolton Corporation		1	1	0
Bonner, J. R.	Harrogate.....	0	5	0
Bootle Corporation		5	5	0
Bournemouth Gas & Water Co.		2	2	0
Bradford Gas Department		1	1	0
Brain, H. A.		0	5	0
Bray, George & Co.	Leeds.....	1	1	0
Briggs, C. H.	London	0	10	6

Name	Town	Amount £ s. d.		
Brighthouse Corporation		1	1	0
Bristol Corporation		5	5	0
British Electrical and Allied Manufacturers' Association	London	5	5	0
British Electrical Development Association...	London	100	0	0
British Gas Light Co. Ltd.	London	2	2	0
British Medical Association	London	1	1	0
Bullwinkle, C. L. S.	Harrogate.....	0	10	6
Burnley Corporation		2	2	0
Burnley Gas Department		1	1	0
Bury Corporation		2	2	0
Buxton Corporation		1	1	0
C ablemakers' Association	London	10	10	0
Cadbury Bros.	Bournville	2	2	0
Cadbury, Mrs. G. W.	London	1	1	0
Camberwell Corporation.....		1	1	0
Cambridge University & Town Gas Co.		1	1	0
Capper-Johnson, Dr. L.	London	0	10	6
Cardiff Corporation		1	1	0
Cardiff Gas Light & Coke Co.....		1	1	0
Castleford U.D.C.		1	1	0
	1940-41	1	1	0
Charlesworth, Mrs.	Northampton	0	5	0
Cheltenham & District Gas Co.		1	1	0
Chester United Gas Co.		2	2	0
Chingford Corporation		1	1	0
	1940	1	1	0
Chorley Corporation		1	1	0
Chubb, Sir Lawrence	London	0	10	6
Clarke, David K.	London	0	10	6
Clarke, Dr. R. T.	Ipswich	0	10	6
Claye, Dr. Everard	Stockport	0	10	0
Clayton, R. H.	Manchester	2	2	0
Clegg, Ernest	Bradford	0	10	6
Clevedon & Yatton Gas Co.		1	1	0
Clinch, H. G.	West Ham	0	10	6
Coal Utilisation Joint Council.....	London	10	0	0
Coke Oven Managers' Association.....	Greasborough	1	1	0
Coleridge, C. I. D.	London	0	5	0
Commercial Gas Company	London	3	3	0
Cooper, Miss Irene	Bramhall	1	10	6
Coote & Warren Ltd.	St. Ives, Hunts.	1	1	0
Croydon Gas Company		5	5	0
D avis, D. E.	Manchester	0	10	0
Dawson, Fred		0	10	6
Deptford Corporation		1	1	0
Dixon, Thomas	Pontardawe	0	10	6
Doncaster Corporation		1	1	0
Dudley, Brierley Hill & District Gas Co.		1	1	0
Durham Rural District Council		1	1	0
E aling Corporation		1	1	0
Easington Rural District Council		1	1	0

Name	Town	Amount			
		£	s.	d.	
Eastbourne Gas Company		2	2	0	
East Cowes Gas Company		1	1	0	
Edmonton Corporation		1	1	0	
Elland Gas Company		1	1	0	
Elsworthy, J. Gordon	Dorking	2	2	0	
■ Elwell, Mrs. E.	Mirfield	0	10	6	
Evans, Mrs. Richardson	Dorking	2	2	0	
Exeter Gaslight & Coke Co.		2	2	0	
Eyres, Admiral C. J.	London	0	5	0	
F ailsworth U.D.C.		1	1	0	
Falk Stadelmann & Co. Ltd.		1	1	0	
Farnworth Corporation		3	3	0	
Felling U.D.C.		1	1	0	
Finsbury Corporation		1	1	0	
Fitzgerald, Miss Marion		0	5	0	
Fletcher, G. H.	Sheffield	0	10	6	
Fox, Frank	London	0	10	0	
Fry, Miss Agnes	Highbridge, Som.	0	10	6	
Fry, Miss A. Ruth	Thorpeness	1	1	0	
Fulham Corporation		1	1	0	
G andy, Charles.....	Manchester	5	0	0	
Gandy, Mr. & Mrs. Henry	Corbridge	1	1	0	
Gandy, Miss R. L.	Attleborough	0	10	6	
Ganter, Douglas	Manchester	0	10	6	
Gas Consolidation Ltd.....	London	1	1	0	
Gas Light & Coke Company	London	52	10	0	
Gateshead Corporation		1	1	0	
General Electric Co. Ltd.....	London	5	5	0	
Gillison, Dr. J. A.	Rotherhithe	0	10	0	
Glasgow Gas Department		5	5	0	
Gloucester Corporation		1939	1	1	0
		1940	1	1	0
Godalming Gas & Coke Co. Ltd.		1	1	0	
Gravesend Corporation		1	1	0	
Great Grimsby Gas Co.		1	1	0	
Great Yarmouth Gas Co.....		2	2	0	
Greater London Advisory Council for Smoke Abatement		20	0	0	
Greenwich Corporation		1939	2	2	0
		1940	2	2	0
Greenwood, T. A. S.....	Guildford	0	10	6	
Gregory, Dr. Arnold	Manchester	0	5	0	
Grimsby Corporation		1	1	0	
Guildford Gas Light & Coke Co.		2	2	0	
H ackney Corporation.....		1	1	0	
Hadley, H. S.	Epsom	0	10	6	
Halifax Corporation		2	2	0	
Hancock, Arthur	Manchester	0	10	6	
Hardy, G. & Co.	Manchester	2	2	0	
Harrogate Corporation		2	2	0	
Harrogate Gas Company		1	1	0	
Hartlepool Gas & Water Co.		1	1	0	

Name	Town	Amount		
		£	s.	d.
Hartley, George E.	Old Colwyn	0	5	0
Hay, Dr. John	Liverpool	0	10	6
Heanor U.D.C.		1	1	0
Hebden Royd Gas Department		1	1	0
Herbert Ltd., Alfred	Coventry	1	1	0
Herbert, Mrs. Nellie.....	Buxton	0	10	6
Herford, Miss Amy C.	Manchester	0	10	0
Herne Bay Gas Co.		1	1	0
Hessle Gas Co.		1	1	0
Heston & Isleworth Corporation		2	2	0
Hexham Gas Co.		1	1	0
Heywood Gas Department		1	1	0
Holborn Corporation		1	1	0
Holbrook, Col. Sir Arthur	Kingston Hill	1	0	0
Holmes & Co. Ltd., W. C.	Huddersfield	5	5	0
Horwich, U.D.C.		1	1	0
Hove Corporation.....		1	1	0
Howden & Co. (Land) Ltd., James.....	London	1	1	0
Huddersfield Corporation		2	2	0
Hull Corporation		1	1	0
Humphrey, Miss A. M.	Weybridge	0	12	6
Hunter, T. J. A.	Bridge of Weir	0	10	6
Hutchinson, G. H.	Burton-on-Trent	0	10	6
Hyland, Alfred	Kingsdown	0	10	6
Ideal Boilers & Radiators Ltd.	London	5	5	0
Institution of Gas Engineers	London	52	10	0
Institution of Heating & Ventilating Engineers	London	3	3	0
International Combustion Ltd.	London	1	1	0
Ipswich Gas Light Company		1	1	0
Irlam U.D.C.		1	1	0
Jast, Mrs. Stanley	Twickenham	0	10	6
Jennison, Mrs. W.	Manchester	1	1	0
Johnston, Sidney	Manchester	0	5	0
Keeley, Robert.....	Prestwich	0	10	0
Keene, C. E.	Bournemouth	0	10	6
Keighley Corporation		1	1	0
Kensington Corporation		1	1	0
Kidderminster Corporation		0	10	6
Kidsgrove Gaslight Company		1	1	0
Kirkby-in-Ashfield U.D.C.		1	1	0
Lacey, Stephen	London	2	2	0
Lancaster Corporation		2	2	0
Langford, A. S.	Manchester	0	10	6
Lapage, Dr. C. P.	Manchester	0	10	6
Lea Bridge & District Gas Co.		3	3	0
Lee, Miss Dora C.	Oxford	2	2	0
Lee, Sir Kenneth	Manchester	1	1	0
Leeds Corporation		1939	10	10
		1940	10	10
Leeds Corporation Gas Dept.		25	0	0
Lees, Miss Marjory	Oldham.....	1	1	0

Name	Town	Amount £ s. d.		
Leicester Gas Department		3	3	0
Leominster Gas & Coke Co. Ltd.		1	1	0
Lessing, Dr. R.	London	1	1	0
Lincoln Corporation		2	2	0
Liptak Furnace Arches Ltd.	London	1	1	0
Lister, B. S.	Leeds.....	1	0	0
Littleborough Gas Co.		1	1	0
Liverpool Corporation		10	0	0
Liverpool Gas Company		10	10	0
London Electric Lighting Co. Ltd., City of ...		2	2	0
London & Counties Coke Association		10	10	0
London Electricity Supply Association		10	10	0
London Power Company		1	1	0
Long Eaton Gas Company		1	1	0
Lowestoft Water & Gas Co.		2	2	0
Luton Corporation		2	2	0
Luton Gas Company		2	2	0
M aidstone Gas Company		1	1	0
Malden & Coombe Corporation		1	1	0
Manchester Corporation		26	5	0
Manchester Electricity Department		2	2	0
Manchester Gas Department		5	5	0
Manger, H. A.	London	0	10	6
Mansfield Corporation		1	1	0
Margolis, A.	London	0	10	6
Marshall, G. C.	Huddersfield	0	5	0
Mather, Capt. L. E.	Newton Heath	1	1	0
Melland, Brian	London	0	10	6
Melland, Will	Manchester	3	0	0
Melland, Mrs. W.	Manchester	1	1	0
Melton Mowbray Gas-Light & Coke Co. Ltd.		1	1	0
Merton & Morden U.D.C.		2	2	0
Micklethwait, R. G.	Barnsley	0	10	0
Middleton Corporation		1	1	0
Mid-Kent Gaslight & Coke Company		1	1	0
Midlands Advisory Council for Abatement of Smoke & Atmospheric Pollution	Birmingham	1	1	0
Mill, Dr. L. M. D.	Edinburgh	1	0	0
Millar, A. Walker	Edinburgh	0	10	6
Mirfield U.D.C.		1	1	0
Mitcham Corporation		3	3	0
Monmouthshire & South Wales Coal Owners' Association	Cardiff	1	1	0
Moon, Edward R. P.	London	0	5	0
Morgan, D. & Sons	Cardiff	1	1	0
Morley Corporation		1	1	0
McDougall, A.	Charlestown	2	2	0
McHugh, F. G.	Leicester	0	5	0
McLachlan, Thomas	London	0	10	6
N ational Gas Council	London	52	10	0
Newcastle-upon-Tyne Corporation		2	2	0
Newcastle & Gateshead Gas Company		1	1	0
Newcastle-under-Lyme Corporation		1	1	0

Name	Town	Amount £ s. d.		
Newton-le-Willows U.D.C.....		1	1	0
Nicholson, Philip B.	Wath-upon-Dearne ...	0	10	6
North Middlesex Gas Company		2	2	0
Nottingham Corporation.....		1939	5	5 0
		1940	5	5 0
O ldham Corporation			5	5 0
Oldham Gas Department.....			2	2 0
Oxford Corporation			2	2 0
Oxford & District Gas Company			1	1 0
P arkinson, B. R.	Hadley Wood		0	7 6
Pearson, Dr. S. Vere	Mundesley		0	10 0
Polding, W. W.	Wigan		0	10 6
Pontefract Bros.....	Manchester		1	1 0
Poplar Corporation			1	1 0
Portsmouth & Gosport Gas Company		1939	1	1 0
		1940	1	1 0
Preston Corporation			1	1 0
Preston Gas Company			1	1 0
Prior Burners Ltd.	London		1	1 0
Pudsey Corporation			1	1 0
R adcliffe Corporation.....			1	1 0
Radiation Ltd.	London		5	5 0
Rathbone, Philip R.	London		0	10 6
Rayner, E. T.	Chigwell		0	5 0
Redditch Gas Co.		1939	2	2 0
		1940	1	1 0
Refuge Assurance Company	Manchester		5	5 0
Rhonnda, Lady	London		0	10 6
Richardson, Edward	West Bridgford		0	5 0
Richmond (Surrey) Corporation			1	1 0
Roberts, Jr., Evan	Manchester		0	10 6
Roberts, John M.	Greenwich		0	10 6
Robinson, Mrs. Edward	Selsey		1	1 0
Rochdale Corporation		1940	3	3 0
		1941	3	3 0
Rogers, Phil	Bath		2	2 0
Rothwell U.D.C.			1	1 0
Rowley Regis Corporation			2	2 0
Royton U.D.C.			1	1 0
Russell, Miss Diana	London		0	10 0
S t. Helens Corporation			1	1 0
Salford Corporation			1	1 0
Salford Gas Committee			2	2 0
Sanitary Inspectors' Association	London		1	1 0
Scarborough Corporation			1	1 0
Scarborough Gas Company		1940	1	1 0
		1941	1	1 0
Scottish Branch N.S.A.S.			6	6 0
Scott Park, Dr. S. D.	Glasgow		0	10 6
Seale, Mrs. I. L.	Prestatyn		0	10 6
Selka, D.	Bradford		0	5 0

Name	Town	Amount			
		£	s.	d.	
Severn Valley Gas Corporation Ltd.	London	1	1	0	
Severs, J. S.	Withernsea	0	10	0	
Shaftesbury, Lady	Wimborne	0	10	0	
Shaw, Mrs. Bernard	London	3	3	0	
Sheffield Gas Company.....		5	5	0	
Sheffield, Rotherham & District Smoke Abatement Committee		25	0	0	
Shipley U.D.C.		1	1	0	
Shoreditch Corporation		1	1	0	
Shrewsbury Gas Light Company		1	1	0	
Silburn, Mrs. Ethel	Aberystwyth	1	1	0	
Simon, Sir Ernest	Cheadle Heath	2	2	0	
Slagg, J. H.	Sheffield	0	5	0	
Smethwick Corporation		2	2	0	
Smith, Donald V. H.	Glasgow	0	5	0	
Smith & Wellstood Ltd.	London	1	1	0	
Solihull Gas Company		1	1	0	
Southall Corporation		1	1	0	
Southampton Gaslight & Coke Co.		1	1	0	
South-Eastern Gas Corporation Ltd.	London	5	0	0	
South Suburban Gas Co.	London	5	5	0	
Southwark Corporation		1	1	0	
Spenborough Gas Department		1	1	0	
Spenborough U.D.C.		1	1	0	
Stalybridge Corporation		2	2	0	
Stepney Corporation		2	2	0	
Stewart-Smith, Mrs. M.	Stourbridge	0	10	6	
Stockport Gas Committee		2	2	0	
Stoke-on-Trent Corporation		5	5	0	
Stoke-on-Trent Gas Department		1	1	0	
Stourbridge Gas Department		1	1	0	
Stretford Corporation		2	2	0	
Stroud Gas Light & Coke Co.....		2	2	0	
Sturtevant Engineering Co. Ltd.		2	2	0	
Sunderland Corporation		5	5	0	
Swindon United Gas Company		1939	1	1	0
		1940	1	1	0
Swinton & Pendlebury Corporation		2	2	0	
T aylor, Miss M. R.	Bolton	0	5	0	
Taylor, Mrs. Frank, J.P.	Bolton	0	5	0	
Taylor, H. Frankland.....	Disley	0	10	6	
Thackeray, L. E.	London	0	5	0	
Tootal Broadhurst Lee & Co. Ltd.	Manchester	3	3	0	
Tottenham Corporation		1	1	0	
Tottenham & District Gas Company		5	5	0	
Trezise, William E.	Tottenham	1	1	0	
Troup, Lady Winifred	London	0	10	0	
U rmston U.D.C.		1	1	0	
Uxbridge U.D.C.		2	2	0	
Uxbridge, Maidenhead Wycombe & District Gas Co.		1	1	0	
V oeux, H. A. Des.....	Lymington	2	2	0	

Name	Town	Amount £ s. d.		
Wakefield Corporation.....		1	1	0
Wakefield Gaslight Company		1	1	0
Wale, W. H.	Lapworth	1	1	0
Wallasey Corporation		5	5	0
Walsall Corporation		1	1	0
Wandsworth Corporation		1	1	0
Wandsworth & District Gas Company		5	5	0
Ward, Dr. F. A. B.	London	1	1	0
Warrington Corporation		2	2	0
Watt, Dr. Ernest	Edinburgh	0	5	0
Wednesbury Corporation		0	10	6
Wellington (Salop) Gas Company		1	1	0
Wembley Corporation		1	1	0
West Bromwich Corporation		1	1	0
West Ham Corporation		1	1	0
Westminster Corporation		3	3	0
Weston-Super-Mare Corporation		1	1	0
Weston-Super-Mare & District Gas Co.	1939	1	1	0
	1940	1	1	0
West's Gas Improvement Co. Ltd.	Manchester	5	5	0
Whipple, Dr. F. J. W.	London	0	10	6
Whiston R.D.C.....		1	1	0
Widnes Corporation		1	1	0
Wicksteed, J. H.	Abinger Hammer	0	10	0
Wigglesworth, Miss E.	Accrington	0	15	0
Willesden Corporation		1	1	0
Willey & Co. Ltd.	Exeter	2	2	0
Winkworth, D. M.	London	0	5	0
Wolverhampton Gas Co.		2	2	0
Woodall-Duckham Vertical Retort Co. Ltd.	London	2	12	6
Wrexham Corporation		1	1	0
Yeadon & Guiseley Gas Company.....	1939	1	10	0
	1940	1	10	0
York Gas Company		10	0	0
Subscriptions and Donations under 5/-		1	4	6

Total	<u>£1,006</u>	<u>3</u>	<u>6</u>
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Income and Expenditure Account for the Year ended 30th June, 1940.

Balance Sheet, June 30th, 1940.

£1408 18 11½

ABBOIT & SON, Chartered Accountants,
40, South King Street, Manchester, 2.
August 27th, 1940.

MEMBERSHIP FORMS.

INDIVIDUAL.

To The General Secretary, National Smoke Abatement Society,
Woodborough, Nottingham.

Kindly admit the undersigned as a Member/Associate of the
Society. A first Annual Subscription is enclosed, to date from

.....194.....

Signed

Address in full

Minimum Subscription for members
(including Journal) 10/6.

Associate Subscription 5/-.

Life Membership Subscription £25.

COMMERCIAL FIRMS AND AFFILIATED MEMBERS.

(See Constitution, Section 3 and 4).

To The General Secretary, National Smoke Abatement Society,
Woodborough, Nottingham.

Kindly admit the undersigned as a member of the Society.

A first Annual Subscription of £ : : is enclosed
to date from.....194.....

Signed

On behalf of.....

Address

Representative(s) appointed.....

Address Communications to { Firm
Representative.

Minimum Subscription, One Guinea.

DONATION FORM.

To The General Secretary Nothwich Smoke Abatement Society,
Woodborough, Nottingham.

I enclose £.....as a donation to the Society, and
would be pleased to receive notices, literature, etc., from time to
time. (Delete latter clause if desired.)

Signed

Address

To be forwarded to the Society.
BANK ORDER FORM.

To The Manager,

TheBank.

Please pay the sum of £ : : immediately
and on the same date in each succeeding year until further notice,
to the credit of the National Smoke Abatement Society, with the
District Bank Ltd., 57 Victoria Street, Westminster, S.W.1.

Signed

Address

Date194.....

FORM OF BEQUEST.

"I give free of duty to the National Smoke Abatement Society,
of Chandos House, Buckingham Gate, Westminster, S.W.1,
temporarily at Woodborough, Nottingham, the sum of £.....
to be applied to the general purposes of the said Society, and I
declare that the receipt of the Treasurer for the time being shall
be a sufficient discharge to my Executors for the same."
P.T.O.

TO-MORROW

In the midst of strife and destruction men and women are everywhere thinking hopefully of the world they, tomorrow, will have the responsibility and privilege of building ; determined to achieve not only security and justice, but those material conditions that are essential for full and healthy life.

Many are the needs to be fulfilled, and among them is the need for pure air. Without pure air, health, cleanliness and colour cannot be restored to our towns and cities. The war can and should mark the end of the palaeotechnic era of which smoke and grime have been the black symbols.

If this idea is forgotten today it may be overlooked tomorrow, and great opportunities may be lost. To prevent this and to prepare for tomorrow are now the primary tasks of the National Smoke Abatement Society. How far it will succeed depends largely upon all those who by their membership constitute the Society.

The problems of tomorrow are inevitably overshadowed by the problems of today—but tomorrow always comes.

The Society will be grateful for donations and new subscriptions, and also draws attention to the Form of Bequest printed within.

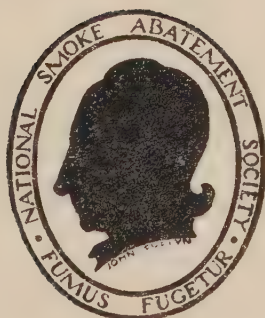
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12TH

**ANNUAL
REPORT**



**NATIONAL
SMOKE ABATEMENT
SOCIETY**



1 9 4 2

D B F

The Society's Defence Bond Fund is a unique means of helping the war effort and the post-war effort with a single contribution. The money subscribed will not be used by the Society until after the war, when it will be of the greatest value in what is likely to be a period of the most important opportunities for smoke abatement **—if we are strong enough to do the spade work that will be necessary.** Until then the money will go towards the present task of bringing nearer the successful ending of the war.

All who are anxious and determined to ensure victory and to ensure a post-war world in which social evils, including that of smoke, will see the beginning of their end, must sympathise with the dual purpose of this fund and will wish it success. Your cheques may be sent to the Society at Woodborough, Nottingham, and should be crossed "Defence Bond Fund Account."

The National Smoke Abatement Society

President : H. A. DES VOEUX, M.D.

Chairman : CHARLES GANDY.

Hon. Treasurer : WILL MELLAND, M.A., J.P.

Hon. Advisory Secretary : Sir LAWRENCE CHUBB.

Standing Counsel : W. R. HORNBY STEER, M.A., LL.B.

General Secretary and Editor : ARNOLD MARSH, M.Sc.Tech., M.Inst F.

Vice-Presidents :

The Rt. Hon. the Earl of Stamford.	Sir Arthur Hill, K.C.M.G., Sc.D., D.Sc. F.R.S.
The Rt. Hon. the Viscount Cecil of Chelwood.	Sir Leonard Hill, M.B., F.R.S., LL.D., Hon. A.R.I.B.A.
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Sir Richard Gregory, Bart., F.R.S.	Peter Fyfe.

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Councillor W. Asbury, J.P.	Alderman J. Lynch.
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Mrs. M. A. Cloudesley Brereton.	Coun. Alex Munro (Scottish Branch)
Mrs. Broughton.	Alderman W. Muirhead.
Dr. R. Veitch Clark, M.A., B.Sc., M.B., Ch.B., D.P.H.	Dr. H. Osborne, M.D., M.R.C.S.
R. H. Clayton, B.Sc.	I. Priestley, M.R.S.I., F.R.S.A.
L. H. Dibblin, F.S.I.A.	Professor C. H. Reilly, O.B.E., M.A., F.R.I.B.A.
Dr. Margaret Fishenden, D.Sc., F. Inst. P.	A. Ritchie, M.B.E., F.R.S.I.
Miss M. Fitzgerald.	Ian Robertson (Scottish Branch)
A. Lindsay Forster, M.I.Mech.E., M.I.E.E.	J. A. Robinson, F.S.I.A.
Dr. W. M. Frazer, M.D., M.Sc., D.P.H.	Dr. E. W. Smith.
Charles Gandy.	A. E. Tanner.
A. L. Holton.	Dr. E. H. Walker, M.B., Ch.B., D.P.H.
Dr. J. Johnstone Jervis, M.D., D.P.H.	

Affiliated Societies and Representatives Appointed to the Council :

British Medical Association—

Dr. G. Clark Trotter, M. Bishop Harman, LL.D., F.R.C.S.

Coke Oven Managers' Association—

F. White, J. Curry.

Institute of Fuel—

Institution of Electrical Engineers—

H. C. Lamb, C. D. Taite.

Institution of Gas Engineers—

D. Cleave Cross, E. Crowther.

Institution of Heating and Ventilating Engineers—

C. Ingham Haden, A. C. Pallot, M.B.E.

Sanitary Inspectors' Association—

T. E. Birtwistle, F.S.I.A.

Society of Medical Officers of Health

Dr. Cyril Banks, M.D., B.S., D.P.H.,

Dr. J. Johnstone Jervis, D.P.H.

Affiliated Local Authorities and Representatives Appointed to the Council :

Acton : J. J. Jenkins. **Adwick-le-**

Street : Councillor T. Bowater,

Councillor J. B. Fuller. **Bath.**

Batley. Bethnal Green. Bingley:

W. E. Cooke. **Birkenhead.**

Birmingham : Councillor Brosch,

Dr. W. R. Martine (Executive).

Bolton : Chairman, Health Com-

mittee. **Bootle :** Councillor Dr. I.

Harris, Dr. F. T. H. Wood, O.B.E.

Brighouse : Alderman B. Asquith,

Mr. C. R. Moss. **Brighton :**

Alderman H. M. Black, J.P., Chair-

man of Health Committee. **Bristol:**

Alderman J. J. Milton, J. A. Robinson,

F.S.I.A. (Executive). **Burnley:**

Mrs. Councillor Clitheroe, Alder-

man Sampson. **Bury :** Councillor

Hartley. **Buxton :** Mr. W. O.

Coates.

Camberwell : Alderman A. F. Cross-

man, Councillor F. W. Shepherd.

Cardiff : Councillor J. Griffiths,

J.P., Dr. J. Greenwood Wilson,

M.D., F.R.C.P., D.P.H. **Castle-**

ford : Councillor A. Pickersgill.

Chester. Chingford : Chairman

of Public Health Committee.

Chorley: Alderman Arnold Gillett,

Councillor T. Hamer.

Darlington : Alderman A. J. Best,

Councillor P. Harrison. **Deptford:**

Chairman of the Public Health and

Housing Committee, Dr. F. L.

Keith, M.D., Ch.B., D.P.H., L.D.S.

Doncaster : Alderman T. Gilber-

thorpe, Dr. R. Watson, M.A., M.B.,

B.Ch., D.P.H. **Durham R.D.C.**

Ealing : Dr. Thomas Orr, M.D., D.Sc.

Easington : Councillor W. Luke,

J. J. Waring, Clerk of the Council.

Edmonton : Councillor G. D.

Euesden, Councillor C. E. Berridge.

Failsworth : Councillor W. Hunt, J.P.

Councillor F. Yarwood. **Farn-**

worth : Councillor J. Seddon.

Felling : Councillor T. Smith,

Mr. R. J. McLaren. **Finsbury :**

Councillor W. Barrie, Dr. N. D.

Dunscombe. **Fulham.**

Gateshead. Gloucester : Dr. Charles

Cookson, M.D., D.P.H. **Gravesend:**

Cookson, M.D., D.P.H. **Gravesend.**

Greenwich : Councillor R. G.

Jagers, Councillor Mrs. Ada

Kennedy. **Grimsby.**

Hackney. Halifax : Dr. C. G. F. Roe,

M.R.C.P., L.R.C.S., L.M., D.P.H.,

D.P.M., J. W. Beaumont, M.R.S.I.

(Executive). **Hammersmith :**

Councillor Mrs. E. Cox, Councillor

Miss J. Bourne. **Harrogate :**

Councillor W. F. W. Rhodes.

Hayes and Harlington : Coun-

cillor D. Page, Councillor P. G.

Soulsby. **Heanor. Hereford.**

Heston and Isleworth. Holborn:

Councillor A. R. Taylour, M.A.,

Dr. J. A. Struthers. **Horwich :**

James Seddon, Councillor W. S.

Roskelly. **Houghton-le-Spring.**

Hove : Councillor A. H. Clarke,

Dr. N. E. Chadwick, M.A., M.D.,

D.P.H. (M.O.H.) **Huddersfield.**

Hull : Alderman W. Turner,

Councillor E. Chapman.

Irlam : Councillor D. Hesford, L. F.

Atherton.

Keighley. Kensington. Kiddermin-

ster : Coun. J. Andrews. **Kirkby-**

in-Ashfield. Lambeth : Coun-

cillor W. J. Geary, Dr. A. G. G.

Thompson, M.A., M.D., D.P.H.

Lancaster : Councillor W. M.

Simpson, Dr. J. D. Buchanan, M.B.,

D.P.H. **Leeds** : Dr. J. Johnstone Jervis, M.D., D.H.P. (Executive), C. H. Manley, M.A., F.I.C. **Leicester** : Alderman Parbury. **Leyton** : Councillor G. S. Flack, B.Sc., Councillor E. A. Rigg. **Lincoln** : Dr. Mohan Lal Bery, M.B., Ch.B., D.P.H., D. G. McGill, M.S.I.A. **Liverpool** : Alderman W. Muirhead (Executive), Dr. W. M-Frazer, M.D., M.Sc., D.P.H. (Executive). **Luton** : Councillor W. G. Roberts, Dr. F. Grundy, M.A., M.R.C.S., D.P.H.

Malden and Coombe.—H. Tunbridge, M.R.San.I., Alderman E. E. W. Manning. **Manchester** : Alderman W. T. Jackson, Councillor T. M. Larrad, Dr. R. Veitch Clark (Executive). **Mansfield**. **Merton and Morden** : Councillor S. Le Gros Clark, J. B. Pointon. **Middleton** : Chairman, Health Committee, Dr. H. L. Settle. **Mirfield** : Councillor J. H. Barraclough, Councillor Hallas Lockwood. **Mitcham**. **Morley**

Newcastle - under - Lyme : C. A. Wood, M.S.I.A., M.R.San.I. **Newcastle-upon-Tyne** : Councillor W. Thompson, Alderman David Adams, J.P., M.P. (Executive). **Newton-in-Makerfield**. **Nottingham** : Dr. Cyril Banks, M.D., Alfred Wade.

Oldham : Councillor S. T. Marron, Dr. J. T. C. Keddle. **Oxford** : Stewart Swift.

Poplar : Alderman J. H. Jones, Councillor H. Boulton. **Preston** : Alderman R. Durham. **Pudsey** : Mr. H. Foster.

Radcliffe. **Richmond (Surrey)** : Dr. C. S. Brebner, M.D., D.S.O., George Laws. **Rochdale** : Dr. J. Innes, M.D., D.P.H., Chairman of Sanitary Sub-Committee. **Rothwell**. **Royton** : Councillor T. H. Lower, Ellis Harrison. **Rowley Regis** : Councillor A. H. Hancock, Dr. F. Asker.

Salford. **Scarborough** : Councillor F. W. Dennis, Dr. S. Fox Linton. **Sheffield, Rotherham and District Smoke Abatement Committee** : Councillor W. Asbury

J.P. (Executive), James Law. **Shipley**. **Shoreditch** : Councillor Mrs. D. Thurtle, Dr. E. H. R. Smithard, M.D., D.P.H. **Smethwick** : Alderman C. G. Kempton, Councillor F. W. Perry. **Southall** : Dr. E. Grundy, I. A. Stephenson. **Southampton**. **Southend-on-Sea** : Chairman of the Sanitary Committee. **Southwark** : Councillor H. Stillman, Dr. W. Stott, M.B., B.S., D.P.H. **Spenborough**. **Stalybridge** : Alderman Potts, Councillor G. Leigh. **Stepney** : Councillor J. J. A. Long, Councillor Mrs. Frankel. **St. Helens** : Alderman T. Hamblett, J.P., Dr. F. Hauxwell, M.B., Ch.B., D.P.H. **Stoke-on-Trent**. **Stretford** : Councillor H. Lord, Dr. E. H. Walker, M.B., Ch.B., D.P.H. (Executive). **Sunderland** : Councillor G. Potts, Dr. A. S. Hebblethwaite. **Swinton and Pendlebury** : Alderman A. T. Corns, Dr. A. E. Wall.

Tottenham : Alderman A. R. Turner. Medical Officer of Health.

Urmston : Councillor H. Stewart.

Uxbridge : Councillor T. R. Thirle.

Wakefield : Chairman, Health Committee. **Wallasey** : Dr. R. B. Berry, Alderman D. P. Charlesworth. **Walsall** : C. A. Stansbury. **Walthamstow** : M. E. Duncan. **Warrington** : Alderman David Plinston, J.P., Dr. Stuart F. Allison. **Wednesbury** : Councillor L. Whitehouse, J.P. **Wembley** : Alderman E. H. Everett, R. M. Turner. **West Bromwich** : Councillor J. T. H. Davies, J.P. **West Ham** : Councillor Mrs. A. A. Barnes, H. G. Clinch. **Weston-Super-Mare**. **Westminster** : Councillor Mrs. Alderson Horne, Dr. A. J. Shinnie, M.D., D.P.H. **Whiston**. **Widnes** : Councillor T. Smith, Councillor E. Hesketh. **Willesden** : L. H. Dibblin (Executive). **Wolverhampton** : Dr. R. H. H. Jolly, M.D., D.P.H. **Wood Green** : Alderman E. J. Anderton. **Wrexham** : Councillor Mrs. C. Jones, Councillor E. S. E. Hackett.

Local Authorities affiliated to the Scottish Branch :

Airdrie, Clydebank, Coatbridge, Dumbarton, Dundee, Edinburgh, Falkirk, Glasgow, Greenock, Hamilton, Irvine, Johnstone, Kirkcaldy, Kirkintilloch, Mother-

well and Wishaw, Paisley, Port Glasgow, Rothesay, Rutherglen, Stirling, County Councils of Ayr, Dunbarton (Western District), Lanark, Renfrew.

Information concerning the Society

The National Smoke Abatement Society was formed in 1929 by the amalgamation of the Coal Smoke Abatement Society (1899) and the Smoke Abatement League of Great Britain (1909). It is an organisation dependent entirely upon voluntary support, and its objects and conditions of membership will be found in the Constitution below.

Offices—Central (General Secretary's) Offices : Temporary Address : Woodborough, Nottingham.
Scottish Branch : City Chambers, Glasgow.
North-Western Branch : 1b, Cooper Street, Manchester.

Lectures, Lantern Slides, Exhibits, etc.—Normal services are at present largely in abeyance, but inquiry is welcomed and every effort will be made to co-operate in any arrangements that it may be desired to make.

Posters.—The following posters are available : Slogan posters, 30 in. by 20 in. (four kinds), at 4d. each. Large pictorial posters, five in set, for use on ex-E.M.B. frames, at 7/6 per set. New photo-colour poster, 30 in. by 20 in. at 6d. each.

Information and Advice.—The Society is glad, at any time, to be of assistance to any person requiring information on smoke abatement and related matters. Inquiries should be addressed to the General Secretary, N.S.A.S., Woodborough, Nottingham.

Constitution of the Society

1. **NAME.**—The Society shall be called the National Smoke Abatement Society.

2. **OBJECTS.**—The Society shall be concerned with the prevention of air pollution generally, and in particular, that arising from coal smoke.

The objects of the Society shall be :—

- (a) To create an informed public opinion on the evils of air pollution.
- (b) To inquire into, and if thought advisable, assist investigations directed towards the abolition of smoke, whether industrial or domestic.
- (c) To take steps to popularize the use of smokeless methods of heat and power production.
- (d) To promote and support legislation for preventing the pollution of the atmosphere.

3. **MEMBERSHIP.**—The Society shall consist of :—

- (a) Life Members.
- (b) Members.
- (c) Associates.
- (d) Affiliated Members.

Life Members.—A donation of not less than twenty-five guineas paid in one amount by any individual, shall constitute the donor a member for life.

Members.—An Annual Subscription of not less than half a guinea in the case of an individual, or one guinea in the case of a commercial firm, shall constitute the subscriber a member. A commercial firm registered as a member shall be entitled to nominate a representative to exercise the privileges of membership as regards attendance at meetings, voting, etc.

Associates.—An Annual Subscription of not less than five shillings shall constitute the subscriber an Associate.

Affiliated Members.—The payment of not less than one guinea by any Local Authority, Society or Institution, shall constitute the subscribing body an Affiliated Member. The Affiliated Member shall be entitled to appoint two representatives to the Council of the Society, who shall receive the privileges of full membership of the Society.

4. PRIVILEGES OF MEMBERSHIP.—The privileges of membership shall include :—

- (a) Advice and assistance in questions relating to smoke abatement and fuel economy as far as the circumstances of the Society will permit.
- (b) Free admission to lectures arranged by the Society.
- (c) The right to receive free of cost, the general publications of the Society as they appear, including the Journal of the Society. Associates shall not, however, receive the Journal and such other literature as may be decided upon from time to time.

5. THE COUNCIL.—The Council of the Society shall consist of the Officers, the members of the Executive Committee, two representatives from each Affiliated Member, together with not more than thirty members to be elected annually at the General Meeting.

The business of the Council shall be to direct the policy of the Society in general and to receive any periodical reports from the Executive or other Committee.

The Council shall meet at such times and places and for such purposes as the Executive Committee shall arrange, and shall also be convened on a requisition signed by not less than three of its members stating the purpose for which such meeting is required.

6. THE EXECUTIVE COMMITTEE.—The Executive Committee shall consist of the Officers and not less than twelve members or representatives of Affiliated Members, who shall be elected annually at the General Meeting of the Society. The Executive Committee shall have power to appoint Sub-Committees, and to co-opt additional members. Five shall form a quorum.

The Committee shall meet as required, and the place of meeting shall be at the central offices of the Society, or other place at the discretion of the Committee.

The business of the Committee shall be to manage the affairs of the Society.

7. OFFICERS.—The Officers of the Society shall be President, Vice-President and Honorary Treasurer, to be elected annually. The Chairman of the Committee and of the Council, shall also be Officers, but shall be elected by their respective Committees.

8. GENERAL MEETING.—The General Meeting of the Society shall be held annually at which shall be presented the Annual Report and the Audited Financial Statement, and at which the Officers, the Council and the Executive Committee for the following year shall be elected. Other general meetings shall be held on the requisition of the Council or Executive Committee, or of 20 members of the Society. One month's notice shall be given of all General Meetings.

9. ALTERATION TO CONSTITUTION.—No change shall be made in the constitution of the Society, except by a two-thirds majority of the members present and voting at the Annual Meeting or at a Meeting called specially for the purpose. A notice in writing of any resolution to be submitted for this purpose

must be sent to all members of the Society at least a fortnight before the Annual or Special General Meeting.

10. **ACCOUNTS.**—Accounts shall be kept of all moneys received and expended by the Society, and once at least every year the accounts of the Society shall be examined and the correctness thereof certified by a qualified auditor.

11. **BRANCHES.**—Branches of the Society shall be constituted, as far as possible, in the towns or districts of the United Kingdom, to deal with local smoke abatement and air pollution problems. Branches shall settle their own constitution and terms of membership, but shall pay an affiliation fee of at least sixpence for every individual member and of two shillings and sixpence for every firm affiliated to the National Society, except in the case of members who are also members of the National Society. Members of the Branches who are not also members of the National Society shall be entitled to attend the General and other meetings of the Society, but shall not be entitled to vote thereat. The Branch shall, however, appoint two delegates to the Council of the National Society and to the Annual General Meeting, who shall have full voting powers.

12. **JOURNAL AND LITERATURE.**—A copy of each issue of the Journal of the Society, together with all other current general literature shall be sent free to each member and delegate from each Affiliated Member ; to the Town Clerk of each Affiliated Local Authority, and to the Secretary of each Affiliated Society or Institution.

13. **INTERPRETATION OF CONSTITUTION.**—The interpretation of these rules together with any question on which the rules are silent shall be decided by the Executive Committee until the next Annual General Meeting.

PUBLICATIONS *of the* SOCIETY

(Post free except where stated).

Initial Post-War Reconstruction. A memorandum on Smoke Prevention in relation to this question, which sets forth proposals by means of which, it is stated, practically the whole of the post-war building could be made smokeless. 24 pages. By post, 2d.

No Clean City. A new illustrated pamphlet showing the need for smoke prevention in post-war reconstruction. This is in effect a supplement to the memorandum described above. 16 pages. By post, 2d.

Smokeless Air. The Society's quarterly Journal. Regular publication is being maintained though the size has temporarily been reduced. The only magazine in the world devoted to the problems of atmospheric pollution. Gratis to members or 2/6 per annum, post free.

The Law of Smoke Nuisances. By W. R. Hornby Steer, M.A., LL.B., Recorder of South Molton, Standing Counsel to the Society. This book, based on an earlier work by Randolph A. Glen and revised and extended in accordance with the Public Health Acts of 1936, is likely to be accepted as a standard work on the subject. In addition to the explanatory chapters it contains tables of statutes

and cases and the relevant sections from the two Acts and the Local Government Act, 1933. 8vo., 65 pages. 1/- paper-backed ; 2/6 cloth-bound.

The Case Against Smoke. A booklet which is intended to give the reader a clear understanding of the nature and extent of the smoke nuisance by means of passages from a number of writers and speakers, each of whom may be regarded as an authority in his own sphere. There are also figures and extracts from official reports and tables. 24 pages, 4to. Price 3d.

Science Museum Exhibition :

Handbook. This is not only a detailed guide to the Exhibition, but, containing a series of twelve authoritative articles on the main aspects of the problem, is a permanent and useful reference book. 80 pages, medium 8vo. Price 6d.

Conference Report. The most complete review of the problem to be published for many years. Twelve papers and discussions in full. 116 pages, 4to. Price, 2/-.

Fumifugium : or the Smoake of London Dissipated. By John Evelyn. This rare and fascinating book, first published in 1661 by command of Charles II, has been republished by the Society with an introduction by Rose Macaulay. In spite of its age this indictment of the smoke evil by the author of the famous Diaries remains true, witty, and penetrating. Illustrated with original wood engravings and a portrait of Evelyn. Paper covers, 6d. Cloth-bound 1/6.

Smoke and Fumes Nuisances from Road Vehicles. The technical and scientific aspects by Dr. J. S. Owens, A.M.Inst.C.E., M.I.Mech.E., and the legal position by R. P. Mahaffy, M.A. 16 pages, 8vo. Price 3d.

Smoke and Aviation. Full report of a special conference on this subject. Four papers and discussions. Illustrated. 40 pages, 8vo. Price 6d.

Smoke Abatement and Fuel Economy. In steam boiler practice. Published by the Manchester and District Regional Smoke Abatement Committee. 12 pages. Price 1d. By post 2d.

Britain's Burning Shame. This pamphlet has been described in a review as "a masterpiece of modern popular propaganda." It puts the smoke problem in its simplest terms, especially as it affects the home, and is profusely illustrated. Single copies, 2d. 12/6 per 100.

Conference Proceedings. Copies are available at 1/- each of the full reports, containing papers and discussion of conferences held in 1932, 1934, 1937, and 1938.

TWELFTH ANNUAL REPORT

for 1941

General Review.

Except in relation to the planning of post-war building and reconstruction, the interests of the authorities and much of the activities both of the Society and of other bodies in smoke prevention remain in the condition of suspended animation to which they were reduced by the more imperative demands of war. Certain aspects of the situation cannot at present be discussed as we should like, but will, after the war, provide material for an examination of exceptional interest.

As smoke is but a consequence of the incomplete combustion of coal and generally of low standards in the utilisation of the nation's fuel resources, it is easy to appreciate how much more efficient the war effort could have been, and how much less the need for the present makeshift and uncertain efforts in fuel economy, had there been any attempt in the past to develop a national fuel policy, which would have included smoke prevention. The findings of the Departmental Committee on Smoke and Noxious Vapours Abatement in 1921, and of the Royal Commission on the Coal Industry in 1925, showed clearly enough the need for a policy to halt both the colossal wastage of fuel and the waste caused by the resulting smoke.

To-day, therefore, we find ourselves in the position of being on the one hand implored to reduce fuel consumption in appliances that cannot but waste an inordinately high proportion of the fuel burned in them, while on the other hand we are compelled to discharge into the air vast quantities of fuel products which properly used might have furthered the war effort in a score of different ways.

The Prime Minister has said that "the use of recriminating about the past is to enforce effective action at the present." Although in this particular case the unfortunate results of apathy and lack of foresight cannot be remedied during the present, we shall be well justified in recriminating about the past if by so doing we can help to enforce effective action in the future.

The more distant future may well judge this to be a barbarous age, more by its reckless squandering of limited natural resources than by the destruction of its own achievements. We can rebuild a thousand cities, but we cannot replace a single seam of coal.

Apart from the Society's own efforts and those of the Scottish Branch, the only activity on behalf of smoke abatement has been in connection with the study of post-war reconstruction, on which a valuable statement has been published by the West Riding of Yorkshire Regional Smoke Abatement Committee. A brief summary of the Observations on Atmospheric Pollution in 1939-40 has been published, and the Liverpool Council of Social Service has issued an

excellent pamphlet entitled "Smoke Abatement," which surveys the effects of smoke and indicates the remedies. (Copies of this may be obtained from the Council, at 14, Castle Street, Liverpool, 2).

The question has naturally received attention, though so far only to a very limited extent, in various papers and pronouncements dealing more generally with post-war development. It is hoped that the Society's work in this field will directly help the smoke problem to secure adequate recognition as one of the factors that can readily be integrated into the general examination of post-war problems.

The Investigation of Atmospheric Pollution.

The short summary of observations made during the year ended 31st March, 1940, which was published in place of the usual full report, was recorded in the Autumn, 1941, issue of *Smokeless Air*. It showed that during the year the pre-war tendency towards lower deposits had been maintained, and that there was an increase in the number of stations recording deposits in the lowest weight class (under 150 tons per annum). A number of observations have, however, had to be discontinued because of the war.

Dr. J. S. Owens.

The smoke abatement movement has suffered a serious loss by the death, in December, 1941, of Dr. J. S. Owens, Superintendent of Observations for the Investigation of Atmospheric Pollution, Department of Scientific and Industrial Research. Dr. Owens had for many years been intimately associated with the movement, and was very largely responsible both for the development of the systematic observation of air pollution and for the instruments and technique required for this purpose. It is very doubtful whether, without his inventive interest and the labour that he so willingly devoted to it, the problem could already have attained the recognition it now enjoys. Dr. Owens made a unique and invaluable contribution to the movement, and his death is deeply regretted.

The Society.

Despite the obvious difficulties interest in the work and welfare of the Society has been maintained to a gratifying extent, and appreciation must be recorded to all who, by continuing their membership contributions, and in other ways, have shown their sympathy in our resolve to carry on as actively as possible within the limit set by present circumstances. Such continuation of active work has indeed been made imperative by the growth of attention to the problems which must be faced after the war, for to neglect the factor of smoke prevention now would inevitably mean failure to achieve results in the future. It is abundantly clear that the value of this work is recognised both by members and by others outside the Society.

No meetings have been held during the year under review, but reports have been made and the Executive Committee consulted on major questions.

Membership continues to be fairly well maintained, although the usual loss of members, increased by war conditions, is not so readily made up as in normal times by the introduction of new members. So far the position is not serious, but new members will, as always, be very welcome, and anything that our present members may be able to do to secure the introduction of new members will be greatly appreciated.

The Society has maintained its contact with other organisations and has continued to send its publications to many interested quarters and libraries.

Inquiries and requests for information are at present limited in number, but from time to time the Society is able to perform services of the kind which in normal times are frequent. The value of arrangements which ensure day by day attention to all business is considerable, and has undoubtedly helped the Society to maintain its position.

Smokeless Air.

The journal has continued to be published at quarterly intervals and has during the past year been the most important medium, if not the only possible medium, for the discussion of the question of smoke prevention in relation to reconstruction. The absence of conferences and meetings has made it possible for the contents of *Smokeless Air* to have greater relative importance and more varied interest than has perhaps been possible before.

Paper supply difficulties may for the time being affect what is already an attenuated publication, and it may be necessary to publish only three times a year, maintaining the present size, rather than to reduce still further the number of pages.

Reconstruction.

The most important task of the Society during the year has been its examination of the possibilities of smoke prevention in the planning of post-war building and reconstruction. The importance of this work may, indeed, be greater than is at present apparent, and it is likely that future progress towards smokeless air may to a large extent depend upon the work now being done and the proposals now being put forward.

The tasks of reconstruction and plans for the transition of industry to a peace-time basis after the war may make possible far-reaching developments that will assist the abatement of existing smoke, but such potential developments cannot influence the building that will have to begin immediately the war ends. The problem therefore divides itself into long-term possibilities and the possibilities of the initial stages of reconstruction, and so far the Society has concerned itself only with the latter, as the more urgent aspect of the problem.

In March, 1941, an Interim Memorandum on the subject was submitted to the Minister of Works and Buildings and the Minister without Portfolio. This short memorandum was reproduced in the Spring, 1941, issue of *Smokeless Air*.

Since then a more comprehensive and detailed examination of the question has been made, and a further memorandum has been prepared and approved by the Executive Committee. This is being submitted to the Ministers mentioned above and to the Minister of Health. It will subsequently be published, and its examination and support will be requested of Local Authorities and all interested organisations. In other ways, too, the memorandum will be used to promote discussion and interest in the possibilities of smoke abatement.

The memorandum is concerned only with the practical measures proposed, and does not deal with the more general question of the need for smoke prevention in reconstruction, which is dealt with in a supplementary pamphlet entitled *No Clean City*.

The Defence Bond Fund.

The need for resources that will permit a vigorous campaign after the war, without having to spend possibly important time in building them up, led to the appeal, made during the Summer of 1941, for special donations to be used for the purchase of Defence Bonds. This fund was started off by a transfer of £200 from the general bank account, but it has been supported only to a moderate extent by members and others. Defence Bonds have been purchased to the full amount subscribed, and the Society's reserves during this waiting period are thus assisting the national savings campaign.

The Fund will remain open until the end of the war, and it is hoped that many who have not so far given it their support will find it possible to make some contribution, small or large.

General Finance.

The Statement of Accounts and Balance Sheet for the year ended 30th June, 1941, show that the financial position of the Society remains relatively unchanged. There has been a further small reduction in subscriptions and other income, but as expenditure has continued to be kept well below income there is a further useful increase in the Society's reserves.

The continued support of all whose names are included in the subscription list which follows is greatly appreciated. Much of this support is given to us not without difficulty, and maintained only because of close personal interest in the Society and its work. The knowledge that this interest and approval is there and does not diminish is one of the chief sources of the confidence which enables the Society to remain active under present conditions.

CHARLES GANDY, *Chairman*.

WILL MELLAND, *Hon. Treasurer*.

ARNOLD MARSH, *General Secretary*.

SUBSCRIPTIONS and DONATIONS

for the year ended 30th June, 1941

	£	s.	d.		£	s.	d.
Acworth, A. W.	0	10	6	Bristol Corporation	1	1	0
Acworth, Miss E. A.	1	1	0	Bristol Gas Company	2	2	0
Acworth, Miss W. B.	2	2	0	British Commercial Gas			
Adwick-le-Street U.D.C.	1	1	0	Association	50	0	0
Affleck & Brown Ltd.....	2	2	0	British Electrical and Allied			
Almond, J. C., 1940	0	10	6	Manufacturers' Association	5	5	0
Almond, J. C., 1941	0	10	6	British Electrical Development			
Alston, Dr. J. M.	0	10	6	Association	100	0	0
Altrincham Gas Company ...	1	1	0	British Gas Light Co. Ltd.....	2	2	0
Andrew, W. H.	0	5	0	British Medical Association ...	1	1	0
Anonymous	1	0	0	Brown, G. L.	1	1	0
Ascot Gas Water Heaters Ltd.	10	10	0	Bullwinkle	0	10	6
Ashwell & Nesbit Ltd.	0	5	0	Burnley Corporation	2	2	0
Ashton Bros. & Co. Ltd.	2	2	0	Burnley Gas Department	1	1	0
Ashton-under-Lyne Electricity							
Dept.....	1	1	0	Cable Makers' Association ...	10	10	0
Atkinson, Mrs. M.	1	0	0	Cadbury Bros.	2	2	0
				Cadbury, Mrs. G. W.	1	1	0
Banbury Gas Company	1	1	0	Camberwell Corporation	1	1	0
Barlow, Miss A. E. F.	0	10	0	Cambridge University & Town			
Barlow, Sir Thomas	0	10	6	Gas Light Co.	1	1	0
Barranger, E., 1939	0	10	6	Cannock District Gas Co. Ltd.	1	1	0
Barranger, E., 1940	0	10	6	Capper-Johnson, Dr. L.	0	10	6
Barrow, Harrison	0	5	0	Cardiff Corporation	1	1	0
Bath Gas Company	1	1	0	Cardiff Gas Light & Coke Co.	1	1	0
Batley Corporation	1	1	0	Charlesworth, Mrs.	0	5	0
Beard, E.	1	1	0	Charrington, Gardner, Lockett			
Beard, J. R.	1	1	0	& Co. Ltd.	0	10	6
Beit, M.P., Sir Alfred	1	1	0	Cheltenham & District Gas			
Bennett, M. J., 1939	1	0	0	Company	1	1	0
Bennett, M. J., 1940	1	0	0	Chester Corporation	1	1	0
Berry, D. J. Augusta, 1940.....	0	10	6	Chester United Gas Company	2	2	0
Berry, Dr. J. Augusta, 1941 ...	0	10	6	Chingford Corporation	1	1	0
Bethnal Green Corporation...	1	1	0	Chorley Corporation	1	1	0
Bibby & Sons Ltd., J.	5	0	0	Chubb, Sir Lawrence	0	10	6
Bingley U.D.C.	1	1	0	Clarke, D. K.	0	10	6
Birkenhead Corporation	2	2	0	Clarke, Dr. R. T. V.	0	10	6
Birmingham Corporation, 1940	5	5	0	Clayton, R. H.	2	2	0
Birmingham Corporation, 1941	5	5	0	Clegg, Ernest	0	10	6
Birmingham Gas Department	5	5	0	Clevedon & Yatton Gas Co....	1	1	0
Bognor Gas & Electricity Co.	1	1	0	Coal Utilisation Joint Council	10	0	0
Bolton Corporation	1	1	0	Coke Oven Managers' Associa-			
Bonner, J. R.	0	5	0	tion	1	1	0
Bonstow, T. L., 1940	0	10	6	Cooper, Miss I.	0	10	6
Bonstow, T. L., 1941	0	10	6	Coote & Warren Ltd.	1	1	0
Bootle Corporation	5	5	0	Couchman, Rev. R. H.	0	5	0
Bournemouth Gas and Water				Croydon Gas Company.....	5	5	0
Company	2	2	0				
Bradford Gas Department ...	1	1	0	Darlington Corporation, 1940	1	1	0
Bray & Co., George	1	1	0	Darlington Corporation, 1941	1	1	0
Brighouse Corporation	1	1	0	Doncaster Corporation	1	1	0
Brighton Corporation	1	1	0	Dudley, Brierley Hill & Dis-			
Brighton, Hove & Worthing				trict Gas Company	1	1	0
Gas Company	3	3	0	Durham R.D.C.	1	1	0

	£	s.	d.		£	s.	d.
Ealing Corporation	1	1	0	Herne Bay Gas Co.....	1	1	0
Easington R.D.C.	1	1	0	Hessle Gas Co.	1	1	0
Eastbourne Gas Company.....	2	2	0	Heston & Isleworth Corp. ...	2	2	0
East Cowes Gas Company.....	1	1	0	Heywood Gas Department ...	1	1	0
Edmonton Corporation	1	1	0	Holborn Corporation	1	1	0
Elland-cum-Greetland Gas Co.	1	1	0	Holbrook, Col. Sir Arthur ...	1	0	0
Elsworthy, J. Gordon.....	1	11	6	Holmes & Co. Ltd., W. C. ...	5	5	0
Elwell, Mrs. E.	0	10	6	Horder, Lord	0	10	6
Evans, Mrs. Richardson.....	2	2	0	Horwich U.D.C.	1	1	0
Exeter Gaslight & Coke Co....	2	2	0	Houghton-le-Spring U.D.C....	1	1	0
Eyres, Admiral C. J.	0	5	0	Howden & Co. (Land) Ltd., James	1	1	0
Failsworth U.D.C.	1	1	0	Huddersfield Corporation.....	1	1	0
Falk, Stadelmann & Co. Ltd....	1	1	0	Humphrey, Miss A. M.	0	12	6
Farnworth Corporation.....	1	1	0	Hutchinson, G. H.	0	10	6
Felling U.D.C.	1	1	0	Hyland, Alfred.....	0	10	6
Finsbury Corporation	1	1	0				
Forster, A. Lindsay	1	1	0	Ideal Boilers & Radiators Ltd.	5	5	0
Foss, Mrs. Alison.....	0	15	6	Institution of Gas Engineers ...	52	10	0
Fox, Frank	0	10	0	Institution of Heating & Ven- tilating Engineers	3	3	0
Fry, Miss Agnes	0	10	6	International Combustion Ltd.	1	1	0
Fry, Miss A. Ruth	1	1	0	Ipswich Gas Light Company...	1	1	0
Fulham Corporation	1	1	0	Irlam U.D.C.	1	1	0
Gandy, Charles	5	0	0				
Gandy, Mr. & Mrs. H.	1	1	0	Jaffray, F. A.....	2	0	0
Gandy, Miss Rosalie L.	0	10	6	Jast, Mrs. L. S.	0	10	6
Gas Consolidation Ltd.	1	1	0	Jennison, Mrs. W.	1	1	0
Gas Light & Coke Company... 52	10	0		Johnston, Sidney	0	5	0
Gateshead Corporation	1	1	0				
General Electric Company ...	5	5	0	Kay, Miss Doris	0	5	0
Glasgow Gas Department ...	5	5	0	Keene, C. E.	0	10	6
Gloucester Corporation	1	1	0	Keighley Corporation	1	1	0
Gloucester Gas Light Company	1	1	0	Kensington Corporation	1	1	0
Godalming Gas & Coke Co....	1	1	0	Kidderminster Corporation ...	0	10	6
Graucob Ltd., F.	1	1	0	Kingston-upon-Hull Corp. ...	1	1	0
Gravesend Corporation.....	1	1	0	Kirkby-in-Ashfield U.D.C. ...	1	1	0
Great Grimsby Gas Company	1	1	0				
Great Yarmouth Gas Company	2	2	0	Lacey, Stephen	2	2	0
Greenwood, T. A. S.	0	10	0	Lambeth Corporation	1	1	0
Gregory, Dr. A.	0	5	0	Lancaster Corporation	2	2	0
Grimsby Corporation	1	1	0	Langford, A. S.	0	10	6
Guildford Gas Light & Coke Company	2	2	0	Lapage, Dr. C. P.	0	10	6
Gurney, John	1	1	0	Lea Bridge District Gas Co. ...	3	3	0
				Lee, Miss Dora C.	2	2	0
Halifax Corporation	2	2	0	Lee, Sir Kenneth.....	1	1	0
Hammersmith Corp., 1940 ...	1	1	0	Leeds Corporation	10	10	0
Hammersmith Corp., 1941 ...	1	1	0	Leeds Gas Department	25	0	0
Hancock, Arthur.....	0	10	6	Lees, Miss Marjory	1	1	0
Harrogate Corporation	2	2	0	Leicester Corporation, 1940... 10	10	0	
Harrogate Gas Company	1	1	0	Leicester Corporation, 1941... 10	10	0	
Hartlepool Gas & Water Co.	1	1	0	Leicester Gas Department ...	3	3	0
Hartley, George E.	0	5	0	Leominster Gas & Coke Co. Ltd.	1	1	0
Hay, Dr. John	0	10	6	Lessing, Dr. R.	1	1	0
Heanor U.D.C.	1	1	0	Lincoln Corporation	2	2	0
Hebden Royd Gas Dept.	1	1	0	Liptak Furnace Arches Ltd. ...	1	1	0
Herbert Ltd., Alfred	1	1	0	Lister, B. S.	1	0	0
Hereford Corporation	1	1	0	Littleborough Gas Company...	1	1	0
Herford, Miss Amy C.	0	10	0				

	£	s.	d.		£	s.	d.
Liverpool Corporation	10	0	0	Oldham Gas Department	2	2	0
Liverpool Gas Company	10	10	0	Oxford Corporation	2	2	0
London Electric Lighting Co. Ltd., City of	2	2	0	Oxford & District Gas Co. ...	1	1	0
London & Counties Coke Association	10	10	0	Pickston, John (4 years)	2	2	0
London Electricity Supply Association	10	10	0	Parkinson, B. R.	0	7	6
London Power Company	1	1	0	Polding, W. W.	0	10	6
Long Eaton Gas Company ...	1	1	0	Pontefract Bros.	1	1	0
Longley, J. A.	1	1	0	Poplar Corporation	1	1	0
Lowestoft Water & Gas Co....	2	2	0	Portsmouth & Gosport Gas Company	1	1	0
Luton Corporation	2	2	0	Preston Corporation	1	1	0
Luton Gas Company	2	2	0	Preston Gas Company	1	1	0
Maidstone Gas Company	1	1	0	Prior Burners Ltd.	1	1	0
Malden & Coombe Corp.....	1	1	0	Pudsey Corporation	1	1	0
Manchester Corporation	26	5	0	Radcliffe Corporation	1	1	0
Manchester Electricity Dept.	2	2	0	Rathbone, P. R.	0	10	6
Manchester Gas Department	5	5	0	Rayner, E. T.	0	5	0
Manger & Co. Ltd., J.	0	10	6	Redditch Gas Company	1	1	0
Mansfield Corporation	1	1	0	Refuge Assurance Company ...	5	5	0
Margolis, A. E.....	0	10	6	Richmond Corporation	1	1	0
Marshall, G. C.	0	5	0	Roberts, E. (Jr.)	0	10	6
Mather, Capt. L. E.....	1	1	0	Roberts, John M.	0	10	6
Melland, Will	3	0	0	Rochdale Corporation	3	3	0
Melland, Mrs. W.	1	1	0	Rogers, Phil	2	2	0
Melton Mowbray Gas Light & Coke Co. Ltd.	1	1	0	Rothwell U.D.C.	1	1	0
Merton & Morden U.D.C. ...	2	2	0	Rowley Regis Corporation ...	2	2	0
Micklethwait, R. G.	0	10	0	Royton U.D.C.	1	1	0
Mid-Kent Gas Light & Coke Company	1	1	0	St. Helens Corporation	1	1	0
Midlands Joint Council for Smoke Abatement	1	1	0	Salford Corporation	1	1	0
Mill, Dr. L. M. D.	1	0	0	Salford Gas Committee	2	2	0
Millar, A. Walker	0	10	6	Sanger, Mrs. A. D.	0	5	0
Mirfield U.D.C.	1	1	0	Sanitary Inspectors' Assoc. ...	1	1	0
Mon. & S. Wales Coal Owners' Association	25	0	0	Scarborough Corporation ...	1	1	0
Moon, E. R. P.	0	5	0	Scarborough Gas Company ...	1	1	0
Moore, S. H.	1	10	6	Scottish Branch N.S.A.S.	2	2	0
Morgan & Sons, D.	1	1	0	Seale, Mrs. I. L.	0	10	6
Munro, Mrs. M. A.	0	10	6	Selka, D.	0	5	0
Morley Corporation	1	1	0	Severn Valley Gas Corporation	1	1	0
McHugh, F. C.	0	5	0	Severs, J. S.	0	10	0
McLachlan, Thomas	0	10	6	Shaftesbury, Countess of	0	10	0
Macmillan, A. M.	0	10	0	Shaw, Mrs. Bernard	3	3	0
Newcastle-under-Lyme Corp.	1	1	0	Shaw, Sir Napier, 1940	2	2	0
Newcastle-upon-Tyne Corp....	2	2	0	Shaw, Sir Napier, 1941	2	2	0
Newcastle & Gateshead Gas Company	1	1	0	Sheffield, Rotherham & Dis- trict Smoke Abatement Committee	25	0	0
Newport (Mon.) Gas Company	1	1	0	Shipley U.D.C.	1	1	0
Newton, Lord	1	1	0	Shoreditch Corporation	1	1	0
Newton-le-Willows U.D.C. ...	1	1	0	Shrewsbury Gas Light Co. ...	1	1	0
Nottingham Corporation	5	5	0	Silburn, Mrs. Ethel	0	10	6
Oldham Corporation	5	5	0	Simon, Sir Ernest	2	2	0
				Smethwick Corporation	2	2	0
				Smith & Wellstood Ltd.	1	1	0
				Solihull Gas Company	1	1	0
				Southall Corporation	1	1	0
				Southampton Corporation ...	1	1	0

Income and Expenditure Account year ended 30th June, 1941.

1940	INCOME	1941	EXPENDITURE	1941
£ s. d.		£ s. d.		£ s. d.
1,006 3 6	Subscriptions	946 0 0	Salaries	504 15 3
15 6 8	Sale of Literature	22 4 5	Rent, Rates, Gas, Water and Heating	45 11 2
43 1 0	Conference Fees	—	Printing and Stationery	53 18 6½
4 13 2	Repayment of Income Tax	6 8 2	Travelling Expenses	13 17 6
5 5 8	DIVIDENDS FROM INVESTMENTS, ETC.:	4 8 7	General Expenses, Postages and Telephone	78 18 9
8 2 9	Commercial Union Assurance Co.	7 3 11	Printing "Smokeless Air" (less Receipts from Adver- tisements)	110 13 9
7 16 7	London, Midland and Scottish Railway Company	8 0 5	Surplus of Income over Expenditure	186 15 3½
7 11 2	Interest, Manchester and Salford Savings Bank...	0 4 9		
	Sundry Receipts			
£1,098 0 6		£994 10 3		£994 10 3

Defence Bond Account

Transfer from General Bank Account	£ s. d. 200 0 0	Balance, June 30th, 1941	£ s. d. 260 5 0
Donations	60 5 0		
	£260 5 0		£260 5 0

Balance Sheet, 30th June, 1941

	£ s. d.	£ s. d.		£ s. d.	£ s. d.
SURPLUS:			INVESTMENTS (GENERAL):		
Balance as at June 30th, 1940	1,368 18 11½		Commercial Union Assurance Co. Ltd., £25 Stock	205 11 0	
Add Surplus of Income over Expenditure ...	186 15 3½		at Cost		
	1,555 14 3		London, Midland and Scottish Railway Co., £313	279 5 11	
Less Transfer to Defence Bond Fund	200 0 0		4 per cent. Debenture Stock at Cost	306 11 6	
	1,355 14 3		Manchester and Salford Savings Bank Deposit		
DEFENCE BOND FUND:			Cash at Bank and in Hand (General)		791 8 5
Balance	260 5 0		DEFENCE BOND FUND INVESTMENTS:		604 5 10
PEGASUS TRUST:			3 per cent. Defence Bonds	260 0 0	
Donation to Film Competition held in abeyance	40 0 0		Cash in Hand	0 5 0	
				260 5 0	
				£1,655 19 3	

Audited and found correct.
September 23rd, 1941.
(Signed) ABBOTT & SON, Chartered Accountants,
40, South King Street, Manchester.

Postscript

The wartime work of the Society has developed into the effort to maintain an active nucleus for the smoke abatement movement as a whole, and to study and make proposals for the essential work of integrating smoke prevention in the plans for post-war reconstruction.

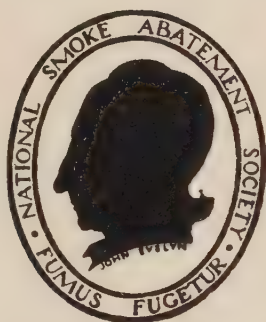
Already published is the Memorandum on "Smoke Prevention in Relation to Initial Post-War Reconstruction," and the pamphlet "No Clean City." Other aspects of the question continue to be discussed in *Smokeless Air*, and in due course it is hoped to publish proposals and long-term plans for a progressive abolition of existing smoke.

Even now the Society could usefully expand its general activities and publicity work, but economy of expenditure remains an all-important factor. When the war ends, however, the fullest possible effort will have to be made, and the stronger our position then the more fruitful will that effort be.

We appeal, therefore, to all our members to continue their valued support, and to others to assist our work by becoming members or by donations to the Society's Defence Bond Fund.



13TH ANNUAL REPORT



NATIONAL SMOKE ABATEMENT SOCIETY

1943

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The National Smoke Abatement Society

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A. L. Holton.	Dr. E. H. Walker, M.B., Ch.B., D.P.H.
Dr. J. Johnstone Jervis, M.D., D.P.H.	

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British Medical Association—Dr. G. Clark Trotter, M. Bishop Harman.
Coke Oven Managers' Association—F. White, J. Curry.

Institute of Fuel—

Institution of Electrical Engineers—H. C. Lamb, C. D. Taite.

Institution of Gas Engineers—D. Cleave Cross, E. Crowther.

Institution of Heating and Ventilating Engineers—C. Ingham Haden, A. C. Pallot.

Sanitary Inspectors' Association—T. E. Birtwisle.

Society of Medical Officers of Health—Dr. Cyril Banks, Dr. J. Johnstone Jervis.

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Tottenham : Ald. A. R. Turner, Medical Officer of Health.

Urmston : Cr. H. Stewart. **Uxbridge** : Cr. T. R. Thirtle.

Wakefield : Ald. Mrs. F. W. Stott. **Wallasey** : Dr. R. B. Berry, Ald. D. P. Charlesworth. **Walsall** : C. A. Stansbury. **Walthamstow** : M. E. Duncan. **Wandsworth** : Cr. Parkinson Smith. **Warrington** : Ald. David Plinston, Dr. Stuart F. Allison. **Wednesbury** : Cr. L. Whitehouse. **Wembley** : Cr. W. R. Dudden, R. M. Turner. **West Bromwich** : Cr. J. T. H. Davies, W. W. Foakes. **West Ham** : Cr. Mrs. A. A. Barnes, H. G. Clinch. **Weston-super-Mare**. **Westminster** : Mrs. Alderson Horne, Dr. A. J. Shinnie. **Whiston**. **Widnes** : Cr. T. Smith. **Willesden** : L. H. Dibblin (Executive). **Wolverhampton** : Cr. R. E. Probert, Dr. R. H. H. Jolly. **Wood Green** : Ald. E. J. Anderton, Cr. W. A. Vant. **Wrexham** : Cr. E. S. E. Hackett, L. A. Stroud.

Local Authorities affiliated to the Scottish Branch :

Airdrie, **Clydebank**, **Coatbridge**, **Dumbarton**, **Dundee**, **Edinburgh**, **Falkirk**, **Glasgow**, **Greenock**, **Hamilton**, **Irvine**, **Johnstone**, **Kirkcaldy**, **Kirkintilloch**, **Motherwell** and **Wishaw**, **Paisley**, **Port**

Glasgow, **Rothsay**, **Rutherglen**, **Stirling**, **County Councils of Ayr**, **Dumbarton (Western District)**, **Lanark**, **Renfrew**.

STILL AVAILABLE

Smoke Prevention in relation to Initial Reconstruction

The Memorandum submitted by the Society to the Government Departments concerned with reconstruction, which leads to the conclusion that, with reasonable foresight, practically the whole of the post-war building programme can be smokeless in operation.

No Clean City

An illustrated pamphlet supplementing the above memorandum and showing why it is essential to secure smoke-free cities if the full benefits of post-war planning are to be realised.

Each 2d. Obtainable from the Society.

THIRTEENTH ANNUAL REPORT

for 1943

General Review.

There is again little to record of direct smoke abatement activity other than the work of the Society, although developments during the year are indirectly of considerable importance. Enough has been published in recent months to indicate the disquiet caused by the suspension of smoke abatement legislation and the direct encouragement, for security purposes, of smoke production from industrial plant. It is as yet impossible to assess the consequences of this regrettable war-time requirement, or to judge its effectiveness for the purposes for which it has been demanded. Nor can the resultant effect of the fuel economy campaign, and particularly the Waste of Fuel Orders, which are incompatible with excessive smoke production, readily be appreciated from the smoke prevention viewpoint. The position of the smoke prevention work of the Public Health Authorities, in many cases still being developed up to the outbreak of the war, is therefore confused and confusing, but it is apparent that much valuable ground has been lost and that this important aspect of the movement for clean air has been seriously set back.

Although it is still advisable not to attempt a detailed survey of the situation, it may be stated that it has been closely watched by the Society, which submitted its views to the Authorities concerned both in 1940 and again during 1942. On both occasions, but particularly on the second, the relation between waste and smoke prevention was fully emphasised.

The increasing gravity during the year of the fuel supply position has directed public attention to problems of efficient fuel utilisation in a manner never before possible, and the intensive publicity campaign for fuel economy, because of the permanent effects it is likely to have, is of particular interest to those concerned with the problem of air pollution. On the domestic side circumstances make unlikely any gain other than a new

awareness of the importance and value of fuel, but as far as industrial smoke is concerned the whole of the propaganda is on the lines that have been expounded and pleaded for by smoke prevention workers during the past forty years—unheeded by any but a small number of enlightened engineers and fuel technologists. The existence of the anomalous smoke production regulations prevents the natural relationship between smoke prevention and fuel economy being emphasised as it should be, though it is obvious that smoke reduction will be proportionate to the economies effected.

The creation of a Ministry of Fuel and Power is an event of considerable potential importance from the Society's point of view, for it is through such a comprehensive Ministry that we may hope to see evolved that scientific development and efficient use of our fuel resources in a way that will inevitably lead to the ending of the smoke nuisance. The creation of a Ministry of Fuel and the adoption of a National Fuel Policy have in the past been strongly advocated by the Society. During the war the Ministry must necessarily devote most of its attention to the urgent problems that face it, but it is hoped that it will nevertheless not fail to examine and prepare to overcome the critical problems of the future, which will affect not only the post-war years but the more distant industrial wellbeing of the nation.

Dr. H. A. Des Voeux.

The sudden death of Dr. Des Voeux, President of the Society since its formation in 1929, on 29th May, 1942, cast a shadow of deep regret over the whole smoke prevention movement. The progress made since the beginning of the century has to a very large extent been due to the inspiration and indefatigable labours of Dr. Des Voeux, who, before the present Society was formed, had been Honorary Treasurer of the Coal Smoke Abatement Society since 1898. His work and his person-

laity—his friendly charm and infectious enthusiasm—will be remembered for a long time to come. A fuller tribute to his memory than is possible here was written by Sir Lawrence Clubb in the Summer, 1942, issue of *Smokeless Air*. It may be recorded that, despite the difficulties of the time, his passing was widely recorded in the Press, and that a headline used by a number of papers admirably sums up his great work: "The Man Who Helped Rid London of Fog." It falls to the lot of few men to earn or deserve such a worthwhile and lasting epitaph.

The Society's sympathies have been extended to Mrs. Des Voeux, who has become a member of the Society in her husband's place, and for whose continued friendship we are most grateful.

The Society.

The danger of moribundity which threatened the Society during the first years of the war now seems finally to have been removed, and during the year there has been a continued strengthening of our position, both as regards membership and funds, and even more, in regard to activity and influence. This upward trend has been made possible by the need for developing and giving publicity to a clear policy for the prevention of smoke as a factor in the planning of post-war building. A marked impetus was given by the publication, in March, 1942, of the *Memorandum on Smoke Prevention in Relation to Initial Post-War Reconstruction* and of the supplementary pamphlet, *No Clean City*. Excellent press notices were given to these publications, which were widely circularised, particularly among Local Authorities.

Discussion has been maintained, and further problems dealt with, in the pages of *Smokeless Air*, which appears to have played a useful part in the creation or maintenance of interest. Paper supply restrictions limit the size of the journal and the number of issues a year have had to be reduced from four to three.

Inquiries and requests for information have been rather more numerous than during the first years of the war, and there have been a number of complaints about excessive smoke

production—about which, unfortunately, it has of course been difficult to give any help. Exhibition material has been loaned for use in post-war planning exhibitions at Liverpool and Tyneside. Several addresses and papers on the subject have been given during the year. There has been some discussion in *Smokeless Air* on the possible desirability of changing the name of the Society to one more expressive of the modern conception of full smoke *prevention* or *abolition*, as opposed to the rather vague and compromising *abatement*. Although there is no need to give immediate attention to this question it is of considerable interest, and a change may well help to strengthen our work in the near future.

During the year the Society applied for, and was duly elected to, membership of the Parliamentary and Scientific Committee. This body is composed of Peers and Members of the House of Commons and of representatives of affiliated scientific associations and institutions. The Society appoints a representative to the Executive Committee and receives the bulletin "Science in Parliament" and other publications and information from the Committee.

Reconstruction.

Prior to its publication the Memorandum mentioned above was submitted to the Ministry of Works and Planning, the Ministry of Health, the Minister Without Portfolio, and later, to the Paymaster-General and the Ministry of Fuel and Power. A further memorandum, amplifying the domestic heating sections of the original statement, was prepared at the invitation of, and submitted to, the Design of Dwellings Sub-Committee of the General Advisory Housing Committee of the Ministry of Health.

These memoranda outline a policy which, if adopted, will effectually prevent the emission of smoke from the new buildings to be erected when the war ends. When once all new building is smokeless the problem as a whole will be at the beginning of the road to complete solution, and attention can then be given to the further question of abolishing smoke from existing buildings. The two problems

are separate but essentially complementary, and the second is now being studied with a view to making further proposals for a plan to make possible the progressive elimination of smoke from existing sources within a prescribed period of time.

A considerable, though not yet sufficient, amount of approval has been given to the Society's proposals, and in particular may be mentioned the resolutions of support that have been adopted (to date) by 77 Local Authorities. It remains to be seen, of course, whether the proposals made are fully or partially accepted, or whether they are neglected as were the proposals of the Departmental Committee of the Ministry of Health after the last war. This last possibility would be lamentable, for the case for adequate measures for the prevention of smoke from new sources is now overwhelming, whether considered as an isolated question or, more correctly, as an integral factor in a general pattern for reconstruction that extends from Public Health, through Town Planning, to Fuel Economy and the conservation of our fuel resources.

Whether success comes to our immediate endeavours or not, it can now be seen that the situation created by the war, together with the clarification of the problem and emergence of more concrete policies than has previously been possible, are bringing the Society into a far more favourable position for making decisive demands and for undertaking a more determined and effective campaign for the final ending of the nuisance.

Finance.

Reference to the accounts on a later page will show an increase in subscriptions and also an increase in expenditure, the latter being mainly due to the cost of printing the reconstruction publications. A surplus of income over expenditure is again shown, so that the balance sheet once more records a further small strengthening of the Society's reserves.

A number of new members have joined during the year, and others, whose subscriptions lapsed at the outbreak of war, have been good enough to recommence them. The steady maintenance of membership, despite all difficulties, is a source of confidence and provides that feeling of stability without which it is difficult to plan ahead with any certainty.

It will be noted that the Defence Bond Fund shows a balance of some £400, but it may be pointed out that £250 of this total is money transferred from the current account, and that £150 only are new donations to the fund. This is much less than it was at first hoped might be subscribed towards this special fund intended to be maintained in the form of Defence Bonds until the times comes, after the war, for a vigorous campaign calling for all the money that can be found. The Fund nevertheless remains open, and all members who care to help the war effort now, and the work of the Society later, are invited to subscribe.

CHARLES GANDY, *Chairman.*

WILL MELLAND, *Hon. Treas.*

ARNOLD MARSH, *Secretary.*

INFORMATION CONCERNING THE SOCIETY

The National Smoke Abatement Society was formed in 1929 by the amalgamation of the Coal Smoke Abatement Society (1899) and the Smoke Abatement League of Great Britain (1909). It is an organisation dependent entirely upon voluntary support, and its objects and conditions of membership will be found in the Constitution below.

Offices—Central (General Secretary's)

**CHANDOS HOUSE,
BUCKINGHAM GATE,
WESTMINSTER, S.W.1.**

Telephone: ABBey 1359.

Scottish Branch: City Chambers, Glasgow.

North-Western Branch: 1b, Cooper Street, Manchester.

Lectures, Lantern Slides, Exhibits, etc.—

Normal services are at present largely in abeyance, but inquiry is welcomed and every effort will be made to co-operate in any arrangements that it may be desired to make.

Posters.—The following posters are available: Slogan posters, 30 in. by 20 in. (four kinds), at 4d. each

Large pictorial posters, five in set, for use on ex-E.M.B. frames, at 7/6d. per set. New photo-colour poster, 30 in. by 20 in., at 6d. each.

Information and Advice.—The Society

is glad, at any time, to be of assistance to any person requiring information on smoke abatement and related matters.

CONSTITUTION OF THE SOCIETY

1. **NAME.**—The Society shall be called the National Smoke Abatement Society.

2. **OBJECTS.**—The Society shall be concerned with the prevention of air pollution generally, and in particular that arising from coal smoke.

The objects of the Society shall be :

- (a) To create an informed public opinion on the evils of air pollution.
- (b) To inquire into and, if thought advisable, assist investigations directed towards the abolition of smoke, whether industrial or domestic.
- (c) To take steps to popularize the use of smokeless methods of heat and power production.
- (d) To promote and support legislation for preventing the pollution of the atmosphere.

3. **MEMBERSHIP.**—The Society shall consist of :—

- (a) Life Members.
- (b) Members.
- (c) Associates.
- (d) Affiliated Members.

Life Members.—A donation of not less than twenty-five guineas paid in one amount by any individual, shall constitute the donor a member for life.

Members.—An Annual Subscription of not less than half a guinea in the case of an individual, or one guinea in the case of a commercial firm, shall constitute the subscriber a member. A commercial firm registered as a member shall be entitled to nominate a representative to exercise the privileges of membership as regards attendance at meetings, voting, etc.

Associates.—An Annual Subscription of not less than five shillings shall constitute the subscriber an Associate.

Affiliated Members.—The payment of not less than one guinea by any Local Authority, Society or Institution, shall constitute the subscribing body an Affiliated Member. The Affiliated Member shall be entitled to

appoint two representatives to the Council of the Society, who shall receive the privileges of full membership of the Society.

4. **PRIVILEGES OF MEMBERSHIP.**—The privileges of membership shall include :—

- (a) Advice and assistance in questions relating to smoke abatement and fuel economy as far as the circumstances of the Society will permit.
- (b) Free admission to lectures arranged by the Society.
- (c) The right to receive free of cost, the general publications of the Society as they appear, including the Journal of the Society. Associates shall not, however, receive the Journal and such other literature as may be decided upon from time to time.

5. **THE COUNCIL.**—The Council of the Society shall consist of the Officers, the members of the Executive Committee, two representatives from each Affiliated Member, together with not more than thirty members to be elected annually at the General Meeting.

The business of the Council shall be to direct the policy of the Society in general and to receive any periodical reports from the Executive or other Committee.

The Council shall meet at such times and places and for such purposes as the Executive Committee shall arrange, and shall also be convened on a requisition signed by not less than three of its members stating the purpose for which such meeting is required.

6. **THE EXECUTIVE COMMITTEE.**—The Executive Committee shall consist of the Officers and not less than twelve members or representatives of Affiliated Members, who shall be elected annually at the General Meeting of the Society. The Executive Committee shall have power to appoint Sub-Committees, and to co-opt addi-

tional members. Five shall form a quorum.

The Committee shall meet as required, and the place of meeting shall be at the central offices of the Society, or other place at the discretion of the Committee.

The business of the Committee shall be to manage the affairs of the Society.

7. OFFICERS.—The Officers of the Society shall be President, Vice-President and Honorary Treasurer, to be elected annually. The Chairman of the Committee and of the Council, shall also be Officers, but shall be elected by their respective Committees.

8. GENERAL MEETING.—The General Meeting of the Society shall be held annually at which shall be presented the Annual Report and the Audited Financial Statement, and at which the Officers, the Council and the Executive Committee for the following year shall be elected. Other general meetings shall be held on the requisition of the Council or Executive Committee, or of 20 members of the Society. One month's notice shall be given of all General Meetings.

9. ALTERATION TO CONSTITUTION.—No change shall be made in the constitution of the Society, except by a two-thirds majority of the members present and voting at the Annual Meeting or at a Meeting called specially for the purpose. A notice in writing of any resolution to be submitted for this purpose must be sent to all members of the Society at least a fortnight before the Annual or Special General Meeting.

10. ACCOUNTS.—Accounts shall be kept of all moneys received and

expended by the Society, and once at least every year the accounts of the Society shall be examined and the correctness thereof certified by a qualified auditor.

11. BRANCHES.—Branches of the Society shall be constituted, as far as possible, in the towns or districts of the United Kingdom, to deal with local smoke abatement and air pollution problems. Branches shall settle their own constitution and terms of membership, but shall pay an affiliation fee of at least sixpence for every individual member, and of two shillings and sixpence for every firm affiliated to the National Society, except in the case of members who are also members of the National Society. Members of the Branches who are not also members of the National Society shall be entitled to attend the General and other meetings of the Society, but shall not be entitled to vote thereat. The Branch shall, however, appoint two delegates to the Council of the National Society and to the Annual General Meeting, who shall have full voting powers.

12. JOURNAL AND LITERATURE.—A copy of each issue of the Journal of the Society, together with all other current general literature shall be sent free to each member and delegate from each Affiliated Member; to the Town Clerk of each Affiliated Local Authority, and to the Secretary of each Affiliated Society or Institution.

13. INTERPRETATION OF CONSTITUTION.—The interpretation of these rules, together with any question on which the rules are silent, shall be decided by the Executive Committee until the next Annual General Meeting.

COVENANT SUBSCRIPTIONS

By entering into a covenant to subscribe to the Society for seven years or more the Society is able to recover the tax which has been paid on the amount of the subscription. At present rates the benefit to the Society is doubled without any increase in the actual amount paid by the subscriber. The procedure is simple and a specimen form of covenant will be sent on request. We invite members to consider joining in this valuable scheme.

SUBSCRIPTIONS and DONATIONS

for the Year ended 30th June, 1942

	£	s.	d.		£	s.	d.
Acton Corporation	1	1	0	British Electrical & Allied			
Acworth, A. W.	0	10	6	Manufacturers' Assn.....	5	5	0
Acworth, Miss E. A.....	1	1	0	British Electrical Develop-			
Acworth, Miss W. B.....	2	2	0	ment Association.....	100	0	0
Affleck & Brown Ltd.....	2	2	0	British Gas Light Co. Ltd....	2	2	0
Almond, J. C.	0	10	6	British Insulated Cables Ltd.	1	1	0
Alston, Dr. J. M.....	0	10	6	Brown, G. L.	1	1	0
Altrincham Gas Company....	1	1	0	Bullwinkle, C.....	0	10	6
Anonymous.....	1	0	0	Burnley Corporation	2	2	0
Ascot Gas Water Heaters				Cable Makers' Assn.	10	10	0
Ltd.....	10	10	0	Cadbury Bros.....	2	2	0
Ashwell & Nesbit Ltd.	0	5	0	Cadbury, Mrs. G. W.....	1	1	0
Ashton Bros. & Co. Ltd.	2	2	0	Camberwell Corporation.....	1	1	0
Ashton-under-Lyne Elec-				Cambridge University &			
tricity Dept.....	1	1	0	Town Gas Light Co.	1	1	0
Atkinson, Mrs. M.....	1	0	0	Cannock Dist. Gas Co. Ltd.	1	1	0
Baker, G. M.	0	10	0	Capper-Johnston, Dr. L.	0	10	6
Banbury Gas Company	1	1	0	Cardiff Corporation.....	1	1	0
Barber, Stanley S.	0	10	6	Cardiff Gas Light & Coke Co.	1	1	0
Barlow, Miss A. E. F.	0	10	0	Cellan-Jones, Gwynne.....	0	10	6
Barrow, Harrison	0	5	0	Chantler, Philip	0	10	6
Bath Corporation	1	1	0	Charlesworth, Mrs.	0	5	0
Bath Gas Company	1	1	0	Charrington, Gardner,			
Baxendale & Co. Ltd.	2	2	0	Lockett & Co. Ltd.....	0	10	6
Beard, E.	1	1	0	Cheltenham & Dist. Gas Co.	1	1	0
Beard, J. R.....	1	1	0	Chester Corporation	1	1	0
Beattie, Ltd., E. & F.....	1	1	0	Chester United Gas Co.....	2	2	0
Bennett, Dr. James, 1941 ...	0	10	6	Chingford Corporation	1	1	0
Bennett, Dr. James, 1942 ...	0	10	6	Chorley Corporation	1	1	0
Bennett, M. J.	1	0	0	Chubb, Sir Lawrence.....	0	10	6
Berry, Dr. J. Augusta	0	10	6	Clarke, D. K.....	0	10	6
Bethnal Green Corporation	1	1	0	Clarke, Dr. R. T. V.	0	10	6
Bibby, H. P., 1941	2	0	0	Clayton, R. H.....	2	2	0
Bibby, H. P., 1942	2	0	0	Clegg, Ernest	0	10	6
Bibby & Sons, Ltd., J.	5	0	0	Clevedon & Yatton Gas Co.	1	1	0
Bingley U.D.C.....	1	1	0	Clinch, H. G., 1941.....	0	10	6
Birkenhead Corporation.....	2	2	0	Clinch, H. G., 1942	0	10	6
Birmingham Gas Dept.....	5	5	0	Coal Utilisation Jt. Council	10	0	0
Bognor Gas & Electricity Co.	1	1	0	Coke Oven Managers' Assn.	1	1	0
Bolton Corporation.....	1	1	0	Cooper, Miss I.	0	10	6
Bonstow, T. L.....	0	10	6	Coote & Warren Ltd.....	1	1	0
Bootle Corporation.....	2	2	0	Croydon Gas Company.....	5	5	0
Bournemouth Gas & Water				Darlington Corporation	1	1	0
Co.	2	2	0	Davies, D. E.	0	10	6
Bradford Gas Department...	1	1	0	Deakin, Herbert.....	0	10	6
Bray & Co., George	1	1	0	Dixon, Thomas	0	10	6
Brighouse Corp., 1942.....	1	1	0	Doncaster Corporation.....	1	1	0
Brighouse Corp., 1943.....	1	1	0	Dudley, Brierley Hill & Dist.			
Brighouse Gas Dept.	2	2	0	Gas Company	1	1	0
Brighton Corporation	1	1	0	Duguid, Mr. & Mrs. S.	1	1	0
Bristol Gas Company.....	2	2	0	Durham R.D.C.	1	1	0
Bristol Corpn.....	1	1	0	Ealing Corporation.....	1	1	0
British Commercial Gas				Easington R.D.C.	1	1	0
Association	50	0	0	Elland-cum-Greetland Gas Co.	1	1	0

	£	s.	d.		£	s.	d.
Elsworthy, J. Gordon, Esq.	1	11	6	Hebden Royd U.D.C.....	1	1	0
Elwell, Mrs. E.	0	10	6	Hereford Corporation	1	1	0
Eastbourne Gas Co.	2	2	0	Herford, Miss Amy C.	0	10	0
East Cowes Gas Co.	1	1	0	Herne Bay Gas Co.....	1	1	0
Evans, Mrs. Richardson.....	2	2	0	Hessle Gas Co.....	1	1	0
Exeter Gaslight & Coke Co.	2	2	0	Heston & Isleworth Corpn.	2	2	0
Failsworth U.D.C.	1	1	0	Hexham Gas Co.	1	1	0
Farnworth Corporation.....	1	1	0	Heywood Gas Dept.	1	1	0
Felling U.D.C.....	1	1	0	Holborn Corporation	1	1	0
Finsbury Corporation.....	1	1	0	Holbrook, Col. Sir Arthur,			
Foss, Mrs. Alison, 1941	0	10	6	K.B.E.	1	0	0
Foss, Mrs. Alison, 1942	0	10	6	Holmes & Co. Ltd., W. C. ...	5	5	0
Fox, Frank	0	10	0	Horwich U.D.C.	1	1	0
Fox, Capt. H.	0	10	6	Houghton-le-Spring U.D.C.	1	1	0
Fry, Miss A. Ruth	1	1	0	Huddersfield Corporation ...	1	1	0
Fry, Miss Agnes	0	10	6	Hull Corporation.....	1	1	0
Fulham Corporation.....	1	1	0	Humphrey, Miss A. M.	0	12	6
Gandy, Charles	5	0	0	Hutchinson, G. H.	0	10	6
Gandy, Mr. & Mrs. H.	1	1	0	Hyland, Alfred.....	0	10	6
Gandy, Miss Rosalie L.....	0	10	6	Ideal Boilers & Radiators Ltd.	5	5	0
Gandy, Miss Rosalie L.				Institution of Gas Engineers	52	10	0
(donation)	0	10	0	Institution of Heating & Ven-			
Gas Consolidation Ltd.	1	1	0	tilating Engineers	3	3	0
Gas Chambers & Coke Ovens				International Combustion			
Ltd.....	1	1	0	Ltd.....	1	1	0
Gas Companies' Protection				Ipswich Gas Light Company	1	1	0
Association	10	10	0	Irlam U.D.C.	1	1	0
Gas Light & Coke Company	52	10	0	Jaffray, F. A.	2	0	0
Gateshead Corporation	1	1	0	Jast, Mrs. L. S.	0	10	6
General Electric Co.	5	5	0	Johnston, Sidney	0	5	0
Gilders, Mrs. F.	0	5	0	Kay, Miss Doris	0	5	0
Gillison, Dr. J. A.	0	10	0	Keeley, Robert, 1941	0	10	0
Glasgow Corpn. Gas Dept. ..	5	5	0	Keeley, Robert, 1942	0	10	0
Gloucester Corporation	1	1	0	Keene, C. E.	0	10	6
Gloucester Gas Light Co....	1	1	0	Keighley Corporation	1	1	0
Godalming Gas & Coke Com-				Kensington Corporation.....	1	1	0
pany Ltd.	1	1	0	Kidderminster Corpn.	0	10	6
Goodfellow, J. C.....	0	10	6	Kidsgrove Gaslight Co., 1941	1	1	0
Graucob, Ltd., F.	1	1	0	Kidsgrove Gaslight Co., 1942	1	1	0
Great Grimsby Gas Co.	1	1	0	Kirkby-in-Ashfield U.D.C....	1	1	0
Great Yarmouth Gas Co. ...	2	2	0	Kirkman, Mrs.....	0	10	6
Ganter, Douglas, 1940	0	10	6	Lacey, Stephen	2	2	0
Ganter, Douglas, 1941	0	10	6	Langford, A. S.	0	10	6
Greenwood, T. A. S.....	0	10	6	Lapage, Dr. C. P.	0	10	6
Gregory, Dr. A.....	0	5	0	Lea Bridge District Gas Co.	3	3	0
Grimsby Corporation	1	1	0	Lea Recorder Company.....	1	1	0
Guildford Gas Light & Coke				Lee, Miss Dora C.....	2	2	0
Company	2	2	0	Lancaster Corporation	2	2	0
Gurney, John	1	1	0	Lee, Sir Kenneth.....	1	1	0
Hadley, H. S.	0	10	6	Leeds Corporation	10	10	0
Halifax Corporation	1	1	0	Lees, Miss Marjory	1	1	0
Hancock, Arthur.....	0	10	6	Leicester Gas Dept.	3	3	0
Hardy, G., & Co., 1941	2	2	0	Leominster Gas & Coke Co.			
Hardy, G., & Co., 1942	2	2	0	Ltd.....	1	1	0
Harrogate Corporation	2	2	0	Lessing, Dr. R.	1	1	0
Hartlepool Gas & Water Co.	1	1	0	Leyton Corporation.....	1	1	0
Hartley, George E.....	0	5	0	Lincoln Corporation	2	2	0
Hay, Dr. John.....	1	1	0	Liptak Furnace Arches Ltd.	1	1	0
Heanor U.D.C.	1	1	0	Lister, B. S.....	1	0	0
Herbert, Alfred, Ltd.	1	1	0	Littleborough Gas Co.....	1	1	0

	£	s.	d.		£	s.	d.
Liverpool Corporation	10	0	0	Oxford Corporation.....	2	2	0
Liverpool Gas Company	10	10	0	Oxford & District Gas Dept.	1	1	0
London & Counties' Coke Association	10	10	0	Parkinson, B. R.	0	7	6
London Electricity Supply Association	10	10	0	Pearson, Dr. S. Vere	0	5	0
London Power Company ...	1	0	0	Polding, Wm. W.	0	10	6
Long Eaton Gas Company..	1	1	0	Pontefract Bros.	1	1	0
Longley, J. A.	1	1	0	Portsmouth & Gosport Gas Co.	1	1	0
Lowestoft Water & Gas Co.	2	2	0	Preston Corporation	1	1	0
Ludlow Union Gas Co. Ltd.	1	0	0	Preston Gas Company	1	1	0
Luton Corporation.....	2	2	0	Pudsey Corporation	1	1	0
Luton Gas Company	2	2	0	Radcliffe Corporation	1	1	0
Maidstone Gas Company ...	1	1	0	Radiovisor Parent Ltd.	2	2	0
Malden & Coombe Corpn ...	1	1	0	Rathbone, Philip R.....	0	10	6
Manchester Corporation.....	26	5	0	Redditch Gas Co.	1	1	0
Manchester Electricity Dept.	2	2	0	Refuge Assurance Co.....	5	5	0
Manchester Gas Dept.....	5	5	0	Richardson, Edward	0	5	0
Manger & Co. Ltd., J.....	0	10	6	Richmond Corporation	1	1	0
Mansfield Corporation.....	1	1	0	Roberts, Evan, Junr.....	0	10	6
Margolis, A. E.....	0	10	6	Robinson, Mrs. Edward, 1940	1	1	0
Marshall, G. C.	0	5	0	Robinson, Mrs. Edward, 1941	1	1	0
Mather, Captain, L.E.....	1	1	0	Rochdale Corporation	3	3	0
Melland, Will.....	3	0	0	Rogers, Phil. M.	2	2	0
Melland, Mrs. Will	1	1	0	Rothwell U.D.C.	1	1	0
Melton Mowbray Gaslight & Coke Co. Ltd.	1	1	0	Rowley Regis Corporation...	2	2	0
Menzies, Dr. J. Herbert, 1941	0	5	0	Royton U.D.C.....	1	1	0
Menzies, Dr. J. Herbert, 1942	0	5	0	St. Helens Corporation	1	1	0
Merton & Morden U.D.C. ...	2	2	0	Salford Corporation.....	1	1	0
Mid-Kent Gaslight & Coke Co.	1	1	0	Salford Gas Committee	2	2	0
Midlands Joint Council for Smoke Abatement	1	1	0	Samuel, Viscount & Viscountess	1	1	0
Mill, Dr. L. M. D.	1	0	0	Sanitary Inspectors' Assn....	1	1	0
Miller, A. Walker.....	0	5	0	Scarborough Corporation ...	1	1	0
Mirfield U.D.C.	1	1	0	Scarborough Gas Company.	1	1	0
Mon. & South Wales Coal Owners' Association	25	0	0	Scottish Bch. N.S.A.S., 1941	6	6	0
Moore, S. H.	0	10	6	Scottish Bch. N.S.A.S., 1942	6	6	0
Morgan & Sons, D.....	1	1	0	Scott, Park, Dr. & Mrs. D....	0	10	6
Morley Corporation.....	1	1	0	Selby, Henry E. W.....	0	10	6
McHugh, F. C.....	0	5	0	Severn Valley Gas Corpn....	1	1	0
McDougall, A.	1	1	0	Severs, J. S.	0	10	0
MacWilliam, Dr. Henry H.	1	11	6	Shaftesbury, Countess of ...	0	10	6
MacWilliam, Dr. Henry H.	0	10	6	Shaw, C. F.	3	3	0
National Gas Council	52	10	0	Shaw, Sir Napier.....	2	2	0
Newcastle-under Lyne Corpn.	1	1	0	Sheffield & Dist. Gas Co.....	5	5	0
Newcastle-upon-Tyne Corpn.	2	2	0	Sheffield & Dist. Gas Co.....	5	5	0
Newcastle & Gateshead Gas Co.	1	1	0	Sheffield, Rotherham & Dist. Smoke Abatement Com'tee	25	0	0
Newton-le-Willows U.D.C. ...	1	1	0	Shipley U.D.C.	1	1	0
Newport (Mon.) Gas Co.	1	1	0	Shoredich Corporation	1	1	0
Newton, Lord	1	1	0	Shrewsbury Gas Light Co....	1	1	0
Nottingham Corporation ...	5	5	0	Silburn, Mrs. Ethel	0	10	0
North Middlesex Gas Co., 1940	2	2	0	Simon, Sir Ernest	2	2	6
North Middlesex Gas Co., 1941	2	2	0	Slagg, J. H., 1940	0	5	0
Oldham Corporation	5	5	0	Slagg, J. H., 1941	0	5	0
Oldham Gas Department ...	2	2	0	Smethwick Corporation.....	2	2	0
				Smith, Donald V. H.	0	5	0
				Solihull Gas Company	1	1	0
				Southampton Gaslight & Coke Co.	1	1	0
				Southampton Corporation...	1	1	0

	£	s.	d.		£	s.	d.
South Eastern Gas Corpn. Ltd.....	5	0	0	Wallasey Corpn., 1942	5	5	0
South Suburban Gas Co.....	5	5	0	Walsall Corporation	1	1	0
Southwark Corporation	1	1	0	Walthamstow Corpn., 1941..	1	1	0
Spenborough U.D.C.	1	1	0	Walthamstow Corpn., 1942..	1	1	0
Stalybridge Corporation.....	1	1	0	Wandsworth Corporation ...	1	1	0
Stepney Corporation	1	2	0	Wandsworth & Dist. Gas Co.	5	5	0
Stockport Gas Committee ...	2	2	0	Ward, Dr. F. A. B.....	1	1	0
Stoke-on-Trent Gas Dept....	1	1	0	Warrington Corpn., 1941 ...	0	10	6
Stourbridge Corpn. Gas Dept.	1	1	0	Warrington Corpn., 1942 ...	0	10	6
Stretford Corporation.....	1	1	0	Watt, Ernest M. D.....	0	5	0
Stretford Corporation.....	2	2	0	Wayman, Lt.-Col. Myers ...	0	10	6
Stretford & Dist. Gas Board	1	1	0	Wednesbury Corporation ...	0	10	6
Stroud Gas Light & Coke Co.	2	2	0	Wellington (Salop) Gas Co....	1	1	0
Swinton & Pendlebury Corpn.	2	2	0	Wembley Corpn., 1940	1	1	0
Swindon United Gas Corpn.	1	1	0	Wembley Corpn., 1941	1	1	0
Sturtevant Eng. Co. Ltd. ...	2	2	0	Westminster, City of	2	2	0
Taylor, H. Frankland.....	0	10	6	Weston-super-Mare Corpn....	2	2	0
Taylor, Percy W.....	0	10	6	Weston-super-Mare Gas Co.	1	1	0
Thackeray, L. E.....	0	5	0	West's Gas Improvement Co. Ltd.....	5	5	0
Thomas, J. W.....	0	10	0	Whipple, Dr. F. J. W.	1	1	0
Tootal Broadhurst Lee Co. Ltd., 1941.....	3	3	0	Whiston R.D.C.	1	1	0
Tootal Broadhurst Lee Co. Ltd., 1942.....	3	3	0	Wicksteed, J. H.....	0	10	0
Tottenham Corporation.....	1	1	0	Widnes Corporation	1	1	0
Tottenham & Dist. Gas Co....	5	5	0	Willesden Corpn.	1	1	0
Trezise, William E.....	1	1	0	Winkworth, D. M.	0	5	0
Trier, F. Newton, 1941	1	1	0	Woodall Duckham Vertical Retort & Oven Construc- tion Co., Ltd.	2	12	6
Trier, F. Newton, 1942	1	1	0	Wolverhampton Gas Co., 1940	3	3	0
Troup, Lady Winifred.....	0	10	0	Wolverhampton Gas Co., 1941	2	2	0
Urmston U.D.C.	1	1	0	Wolverhampton Electy. Dept.	1	1	0
Uxbridge Corporation	5	5	0	Wrexham Corporation	1	1	0
Uxbridge, Maidenhead, Wy- combe & Dist. Gas Co. ...	1	1	0	Yeadon & Guisley Gas Co., 1941	1	10	0
Vesey, Dr. E. H.	0	5	0	Yeadon & Guisley Gas Co., 1942	1	10	0
Voeux, H. A. Des	2	2	0	Yorkshire Gas Coke Assn....	1	1	0
Wadham, Miss, 1942	0	10	6	Young, Miss A. C.	0	10	0
Wadham, Miss, 1943	0	10	6	York Gas Company.....	10	0	0
Wakefield Corporation	1	1	0	Subscriptions & Donations under 5/-	1	9	0
Wakefield Gaslight Company	1	1	0				
Wales & Monmouthshire Assn. of Gas Engineers and Managers	5	5	0				
Wallasey Corpn., 1941	5	5	0				
					£1,013	19	0

MEMBERSHIP FORMS

For economy in paper the usual membership forms are not included in this Report. Appropriate Membership Forms, Bank Order Form, Form of Bequest, or particulars of Covenant Subscriptions (see page 9) will be sent on request.

Income and Expenditure Account year ended 30th June, 1942.

INCOME			EXPENDITURE.		
1941	£	s. d.	1941	£	s. d.
946 0 0	Subscriptions	1,015 0 0			
22 4 5	Sale of Literature	15 14 8			
6 8 2	Repayment of Income Tax	—			
	DIVIDENDS FROM INVESTMENTS, ETC.—				
4 8 7	Commercial Union Assurance Co.	4 5 8			
7 3 11	London, Midland & Scottish Railway Co.	6 5 2			
8 0 3	Interest, Manchester & Salford Savings Bank	8 5 3			
0 4 9	Sundry Receipts.....	1 13 4			
£994 10 3		£1,051 4 1			

Defence Bond Fund.

£	s. d.	£	s. d.	£	s. d.
200 0 0	Balance, June 30th 1941.....	260 5 0	Balance, June 30th, 1942.....	400 2 1	
60 5 0	Transfer from General Bank Account	50 0 0			
	Interest	8 13 1			
	Donations	81 4 0			
£260 5 0		£400 2 1			

Balance Sheet, 30th June, 1942.

£	s. d.	£	s. d.	£	s. d.
1,368 18 11½	SURPLUS—				
186 15 3½	Balance as at June 30th, 1941.....	1,355 14 3		205 11 0	INVESTMENTS (GENERAL)—
	Add Surplus of Income over Expenditure	89 8 5			Commercial Union Assurance Co., £25
1,555 14 3				279 5 11	Stock at Cost
200 0 0	Less Transfer to Defence Bond Fund....	1,445 2 8			London, Midland & Scottish Railway
		50 0 0			Co., £313—4% Deb. Stock at Cost...
1,355 14 3		1,395 2 8		306 11 6	Manchester & Salford Savings Bank,
					Deposit
260 5 0	DEFENCE BOND FUND—			604 5 10	Cash at Bank and in Hand (General).....
40 0 0	Balance	400 2 1			DEFENCE BOND FUND—
	Pecanus Trust—			260 0 0	3% Defence Bonds
	Donation to Film Competition held in abeyance.....	40 0 0		0 5 0	Cash in hand
£1,655 19 3		£1,835 4 9		£1,655 19 3	

Audited and found correct.
 (Signed) ABBOTT & SON, Chartered Accountants,
 40, South King Street, Manchester.

October 16th, 1942.

PUBLICATIONS

(Post free except where stated.)

Initial Post-War Reconstruction. A memorandum on Smoke Prevention in relation to this question, which sets forth proposals by means of which, it is stated, practically the whole of the post-war building could be made smokeless. 24 pages. By post, 2d.

No Clean City. A new illustrated pamphlet showing the need for smoke prevention in post-war reconstruction. This is in effect a supplement to the memorandum described above. 16 pages. By post, 2d.

Smokeless Air. The Society's quarterly Journal. Regular publication is being maintained though the size has temporarily been reduced. The only magazine in the world devoted to the problems of atmospheric pollution. Gratis to members or 2/6d. per annum, post free.

The Law of Smoke Nuisances. By W. R. Hornby Steer, M.A., LL.B., Recorder of South Molton, Standing Counsel to the Society. This book, based on an earlier work by Randolph A. Glen and revised and extended in accordance with the Public Health Acts of 1936, is likely to be accepted as a standard work on the subject. In addition to the explanatory chapters, it contains tables of statutes and cases and the relevant sections from the two Acts and the Local Government Act, 1933. 8vo., 65 pages. 1/- paper-backed; 2/6d. cloth bound.

The Case Against Smoke. A booklet which is intended to give the reader a clear understanding of the nature and extent of the smoke nuisance by means of passages from a number of writers and speakers, each of whom may be regarded as an authority in his own sphere. There are also figures and extracts from official reports and tables. 24 pages, 4to. Price 3d.

Science Musuem Exhibition :

Handbook. This is not only a detailed guide to the Exhibition, but, containing a series of twelve authoritative articles on the main

aspects of the problems, is a permanent and useful reference book. 80 pages, medium 8vo. Price 6d.

Conference Report. The most complete review of the problem to be published for many years. Twelve papers and discussions in full. 116 pages, 4to. Price, 2/-.

Fumifugium : or the Smoke of London Dissipated. By John Evelyn. This rare and fascinating book, first published in 1661 by command of Charles II, has been republished by the Society with an introduction by Rose Macaulay. In spite of its age this indictment of the smoke evil by the author of the famous Diaries remains true, witty and penetrating. Illustrated with original wood engravings and a portrait of Evelyn. Paper covers, 6d. Cloth-bound, 1/6d.

Smoke and Fumes Nuisances from Road Vehicles. The technical and scientific aspects by Dr. J. S. Owens, A.M.Inst.C.E., M.I.Mech.E., and the legal position by R. P. Mahaffy, M.A. 16 pages, 8vo. Price 3d.

Smoke and Aviation. Full report of a special conference on this subject. Four papers and discussions. Illustrated. 40 pages, 8vo. Price 6d.

Smoke Abatement and Fuel Economy. In steam boiler practice. Published by the Manchester and District Regional Smoke Abatement Committee. 12 pages. Price 1d. By post, 2d.

Britain's Burning Shame. This pamphlet has been described in a review as "a masterpiece of modern popular propaganda." It puts the smoke problem in its simplest terms, especially as it affects the home, and is profusely illustrated. Single copies, 2d. 12/6d. per 100.

Conference Proceedings. Copies are available at 1/- each of the full reports, containing papers and discussion of conferences held in 1932, 1934, 1937, and 1938.

More Members . . .

The Society's membership, after a drop in the early days of the war, is now rising again. But we are anxious for it to increase much more substantially, and appeal to all present members to co-operate by interesting their friends in the work of the Society and persuading them to support it through membership. "No Clean City" and other publications will gladly be sent to members who can use them for such propaganda.

More Defence Bonds . . .

Once again we remind members of the Defence Bond Fund—that unique means for helping the war effort now, and the Society's campaign after the war, with a single contribution. The fund is a reserve, not for unforeseen contingencies, but for helping us to make the most of opportunities that can already be discerned : opportunities that will come only once. Your cheque, payable to the National Smoke Abatement Society and crossed "Defence Bond Fund Account," may be sent to the Society at 94, Manor Green Road, Epsom, Surrey.

14TH ANNUAL REPORT



NATIONAL SMOKE ABATEMENT SOCIETY 1 9 4 4

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Price : TWOPENCE

The Society's Publications on POST-WAR RECONSTRUCTION

Memorandum on Smoke Prevention in Relation to Initial Post-War Reconstruction.

The Memorandum submitted by the Society to the Government Department concerned, which sets forth proposals by means of which, it is claimed, practically the whole of the post-war building could be made smokeless. 24 pages. By post, 2d.

Design and Equipment in Post-War Housing in relation to Smoke Prevention.

A memorandum submitted by the Society at the invitation of, and to, the Design of Dwellings Sub-Committee of the Ministry of Health's Central Housing Advisory Committee. 8 pp. 2d.

No Clean City.

An illustrated pamphlet showing the need for smoke prevention in post-war reconstruction. This is in effect a supplement to the memoranda described above. 16 pages. By post, 2d.

Plan for Clean Air.

An easily read outline of the Society's Proposals and the "Ten Year Plan" in the form of a "quiz" of twenty questions and answers. A useful publication to hand to the uninformed. 6 pages. By post, 2d.

These publications are available in quantity at reduced prices. 1/6 per dozen ; 10/- per 100. We invite local authorities and others to help in their effective distribution.

RECENTLY PUBLISHED.

Proceedings of the London Conference, 1943.

A complete report of the Conference on "Smoke Prevention in relation to Plans for Post-War Reconstruction" held in London on 5th November, 1943. 24 pages, 1/- 9/- per dozen.

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Tottenham : Ald. A. R. Turner, Dr. G. Hamilton Hogben.

Urmston : Cr. H. Stewart. **Uxbridge** : Cr. T. R. Thirtle.

Wakefield : Ald. Mrs. F. W. Stott. **Wallasey** : Dr. R. B. Berry, Ald. D. P. Charlesworth. **Walsall** : C. A. Stansbury. **Walthamstow** : M. E. Duncan. **Wandsworth** : Cr. Parkinson Smith. **Warrington** : Ald. David Plinston, Dr. Stuart F. Allison. **Wednesbury** : Ald. L. Whitehouse. **Wembley** : Cr. W. R. Dudden, R. M. Turner. **West Bromwich** : Ald. J. T. H. Davies, W. W. Foakes. **West Ham** : Cr. Mrs. A. A. Barnes, H. G. Clinch. **Weston-super-Mare**. **Westminster** : Mrs. Alderson Horne, Dr. A. J. Shinnie. **Whiston**. **Widnes** : Cr. T. Smith. **Willesden** : J. S. Radcliffe. **Wolverhampton** : Cr. R. E. Probert, Dr. R. H. H. Jolly. **Wood Green** : Ald. E. J. Anderton, Cr. F. F. Tomlin. **Wrexham** : Cr. E. S. E. Hackett, L. A. Stroud.

York : Cr. T. Harwood, F. Fishburn.

Local Authorities Affiliated to the Scottish Branch :

Airdrie, Clydebank, Coatbridge, Dunbarton, Dundee, Edinburgh, Falkirk, Glasgow, Greenock, Hamilton, Irvine, Johnstone, Kirkcaldy, Kirkintilloch, Motherwell and Wishaw, Paisley, Port

Glasgow, Rothesay, Rutherglen, Stirling, County Councils of Ayr, Dunbarton (Western District), Lanark, Renfrew.

FOURTEENTH ANNUAL REPORT

for the year ended 31st December, 1943

Foreword.

Before the war the Annual Reports of the Society covered the period of the Financial Year, which ends on 30th June. The Reports were presented to the General Meeting held each Autumn and were published towards the end of the year. This procedure entailed a considerable time-lag in the publication of material of interest to members and of use for publicity and information purposes. It meant, for example, that a report of events taking place in July one year would not be published until November or December of the following year. Since the outbreak of the war, in the absence of General Meetings, reports have been issued for the calendar year and published early in the new year. It was suggested at the Annual Meeting held in November that at such meetings an Interim Report only should be presented, and that this should be completed by the officers up to the end of the year, and then printed and issued. This procedure, which was approved, will be of considerable value in helping the Society to publish an up-to-date account of its activities and other events, including, of course, the Autumn Conference itself.

General Review.

The year has been marked by an increased and helpful amount of discussion on the problem of atmospheric pollution, and by a growing appreciation of the possibilities of smoke prevention after the war. Much greater stress is also being laid upon the allied questions, which will not cease to be important after the war, of the more efficient utilisation of fuel and the conservation of our coal resources. The folly of continuing to burn bituminous coal in the raw state, particularly in appliances completely devoid of effective control, is becoming more and more widely recognised, and the Minister of Fuel and Power has stressed the fact that coal must be regarded as a raw material rather than as a finished product.

The Parliamentary and Scientific Committee, of which the Society is a

member, has published during the year an important Report on Coal Utilisation Research in Great Britain, in which the problem of smoke prevention received attention. "The seriousness of the problem," said the report, "is not open to dispute. It adversely affects individual's health, urban amenity and agricultural efficiency. Damage to and corrosion of stonework, metals, fabrics and other forms of property is extensive and entails considerable and continuous expense in maintenance and replacement. . . . It is obviously important that the smoke nuisance should not be perpetuated by failure to use the most modern methods in post-war building and industrial re-equipment."

We should like to express our congratulations to Dr. E. W. Smith, who has been a member of the Society's Executive Committee for many years, on his election as President of the Institute of Fuel, and to commend the attention of our members to his Presidential address.

There has been no full report issued during the year on the Investigation of Atmospheric Pollution, but attention may be drawn to the informative paper by Dr. G. M. B. Dobson and Dr. A. R. Meetham to the Royal Institution on "The Air We Breathe in Town and Country," which has been published in *Smokeless Air*. This outlined the work and findings of the Investigation and referred to the results of the important survey made at Leicester. The report of this survey has not yet been published, which, in view of the present urgent need for strengthening the case for smoke prevention as much as possible, is to be regretted.

The report of Lord Justice Scott's Committee on "Land Utilisation in Rural Areas" recognises the serious influence of air pollution upon the countryside. Paragraph 93 of the report reads :—

"Another possible cause of harm to agricultural production comes from the noxious fumes and poisonous effluents discharged by certain types of factories. Instances have occurred where

smoke or dust from factories or quarries has ruined agricultural crops for miles around, while in other instances effluents from such factories as milk or canning factories have made streams and rivers running through neighbouring farms unfit for watering the stock. Such factories have also frequently marred the beauty of the surrounding country."

In a later section, dealing with the need for developing gas and electricity supplies in rural areas, the report states: "The thermal efficiency achieved by the conversion of coal to gas and coke is such that not only should the use of coke stoves and fires be encouraged on that ground alone, but also as promoting a smoke-free atmosphere."

The Lancashire Branch of the Council for the Preservation of Rural England has published in pamphlet form a memorandum that was submitted to Lord Justice Scott's Committee. Extracts from this memorandum may be quoted as follows:—

"It is little use reconstructing the towns and building fine new houses, or endeavouring to restore urban dignity and beauty if we do nothing to minimise the evil of a smoke polluted atmosphere. South Lancashire suffers terribly from this, and *it may be considered the most serious cause of ugliness and discomfort throughout this area.* A smoke-laden atmosphere leads not only to dingy streets and blackened buildings, but to stunted vegetation, poverty-stricken pastures and low milk yields. . . . Research should be sponsored by the State with a view to utilising our diminishing fuel resource with the greatest economy. All who use fuel should be encouraged in every way to burn the smokeless varieties or to instal modern smokeless stoves. The penalties for serious pollution by industry should be more rigidly enforced on a regional basis."

Two paragraphs of the recently published "County of London Plan, 1943," deal with smoke abatement. "One of the causes of the unsatisfactory conditions in large areas of London," it is stated, "is that of smoke, whether from domestic buildings or industrial or commercial ones, or from locomotives. The cumulative effect, particularly when aggravated

by certain atmospheric conditions, is very great and remedial measures are needed." In view of this statement it is very disappointing to find that the authors of the plan refer only to measures that will have a restricted or incidental effect upon the conditions of the atmosphere, such as the electrification of railways, tenement factories, a smaller number of dwellings, and an increased use of gas and electricity in dwellings, so that, they conclude, "it can be safely assumed that smoke nuisance in the reconstructed areas would be much less acute than it is to-day."

As it would in any case be difficult to prevent the problem in the reconstructed areas to be other than less acute, this does not take us very far. It is to be regretted that a more courageous and up-to-date outlook could not have been embodied in a plan that in many other respects is bold and imaginative. The reconstructed areas can and should be completely smokeless, and to build a new London in the dirty atmosphere of the old London would be as lamentable and as unintelligent as it is unnecessary.

Smoke Production and the War.

Reference was made in the last report to the instructions for the production of smoke, for security purposes, from industrial plant. This unfortunate wartime requirement has led to a marked increase of atmospheric pollution in many areas, and was, of course, to be achieved only by the deliberate lowering of combustion efficiency and wastage of fuel. Representations were made by the Society to the Ministry of Home Security and to other Ministries, both in 1940, when the scheme was first introduced, and again in 1942, when the urgent need for fuel economy coupled with a marked change in defence needs, strengthened very strongly the case for the withdrawal of the instructions.

In the early part of the present year a new Home Security circular indicated that fuel should no longer be used for the purpose of making extra smoke, and that the overriding need was that furnaces and boilers should be operated to use fuel with the greatest possible efficiency. The position was summed up in *Fuel Efficiency News*, a bulletin

issued by the Ministry of Fuel, as follows :—

“ Industrial haze due to smoke from factories certainly makes it more difficult for enemy bombers to spot vital points in industrial areas. But it cannot be stressed too strongly that the fuel situation demands that extra fuel should not be used at present for this purpose.

“ The maximum amount of *work* from the minimum amount of coal is more than a defensive measure : it is one of our strongest weapons of attack. We can and will beat off the enemy with it.

“ Black smoke is a sign of fuel waste.”

The view that extra fuel should not be used for smoke production was a step in the right direction, but this did not restore the normal position whereby smoke abatement restrictive provisions could be applied to cases of excessive smoke emission that, *ipso facto*, revealed inefficient combustion and fuel wastage. The new position was considered by the Executive Committee, and the following resolution was submitted to the Ministries of Home Security, Health, and Fuel and Power :—

“ That this Committee learns with satisfaction that the directions for the production of extra smoke from industrial undertakings have now been modified in so far as the use of fuel for the production of extra smoke is concerned. The Committee is however of the opinion that the powers of Local Authorities to control excessive smoke emission are not yet fully restored, and as the officers of such Authorities could do much to assist the fuel economy campaign and benefit public health by returning to their normal procedure in cases where fuel is being wasted, urges that the Ministry of Home Security's circular 139/1940 be now withdrawn.”

It is now understood, from a statement reported in the Press, that the instructions have been completely withdrawn, and, it is assumed, it will again be possible for Local Authorities to take such action as they may require to check smoke nuisances. It was also reported that one of the reasons for this change of policy is the

fact that industrial smoke haze may interfere with flying from our own operational bases, a consequence that will be appreciated by any who have studied the papers on this subject read to the Society in the past.

We believe that by the careful exercise of their powers, and generally by depending upon persuasion and education rather than coercion, the smoke abatement officers of the local authorities can do a great deal to assist the campaign for economy in the use of fuel. In the circumstances of to-day, with much industrial plant gradually deteriorating and in many cases being subject to overloading, together with the difficulties of fuel supply and of skilled labour, it is inevitable that smoke emissions will be higher than normal, but where there is smoke that can be avoided by the exercise of greater care and understanding, then it is desirable for action to be taken. Not only can fuel be saved, but every reduction of smoke leads to healthier, brighter and cleaner conditions in the industrial towns, upon the vitality of which our offensive power so largely depends.

Reconstruction.

The Society's proposals for measures to prevent the creation of new smoke from buildings and houses to be erected after the war have continued to be discussed and amplified, and have received the support of eighty-six Local Authorities. The list included most of the larger cities and boroughs, and represents a population of nearly eleven millions.

The Executive Committee has added to the proposals contained in the printed memorandum the further suggestions that there should be a central organisation to co-ordinate and ensure similar standards of working for the local or regional bodies which, as proposed, would be required to approve the installations of new industrial and “ commercial ” fuel-burning plant. The new body, it was considered, could also initiate or encourage research on and disseminate information about, new methods and improvements as well as undertaking any investigations that might be desirable into the sources of pollution.

The Ten Year Plan.

Recognising that the case for smoke

prevention in post-war building will be considerably strengthened if it can be shown that it can be followed by the progressive elimination of smoke from existing sources, the Executive Committee has considered and approved further proposals which had previously been discussed in *Smokeless Air* and which have been termed "The Ten Year Plan."

Reference may be made to *Smokeless Air* and to the *Pamphlet for Clean Air* for a fuller statement of this plan, but in brief it envisages, first, the creation of smokeless central zones followed by, at a suitable date, the gradual extension of the initial zones so that, after a period of ten years, the whole of each town could be completely smokeless.

Publications.

During the year a new pamphlet, summarising the Society's proposals in the brief and easily read form of a "Quiz" has been published under the title *Plan for Clean Air*. The pamphlet, *No Clean City*, which has been most successful, has had to be reprinted. In addition to these publications the Society has in stock much of its pre-war literature, including, for example, *The Case Against Smoke*, *Britain's Burning Shame*, *Fumifugium*, and conference reports. Although these are normally sold at marked prices, we shall be glad to supply copies free of charge to members who can usefully distribute them, or to send them to any given address. It is far better that these publications should be doing propaganda work than lying unread on our shelves. The prize-winning poster, "Away with Smoke—Let in the Light," was printed just before the war started, and stocks are available for distribution.

Smokeless Air continues to be published, and despite a further reduction in size necessitated by the Paper Control Orders, has been the means for the dissemination of much important information and for the discussion of topical questions.

The Society.

The curtailment of the Society's work in the early days of the war has been followed by a steady re-development of activities as a result of the need to study the problem of reconstruction. As this process appears to be continuing and growing the Society

has recently transferred its offices from the temporary address at the home of the Secretary to Chandos House, Buckingham Gate, Westminster. This is the same address as before the war, although a different and more convenient suite of offices has been taken. It includes a room sufficiently large for committee and other small meetings and for a small permanent display of exhibits. Members are cordially invited to visit the offices at any time and to make use of our library of smoke abatement literature.

During the year the Executive Committee has recommenced its meetings, which have been held both in Manchester and London. There has also been set up a small and informal panel of consultants to discuss and advise upon matters chiefly relating to the furtherance of the Society's reconstruction proposals.

Discussion in the pages of *Smokeless Air* about the advisability of the Society changing its name has been followed by a consideration of the matter by the Executive Committee. It was agreed that no action should be recommended at present.

Obituary.

We deeply regret to record the death, within a few weeks of each other, of the two Members of Parliament who were elected members of the Society's Council, Sir Francis Freemantle, M.D., and David Adams, J.P. Mr. Adams was also a member of the Executive Committee and was Chairman of the Northumberland and Durham Regional Smoke Abatement Committee. Many members will remember the conference at Newcastle in 1943, the success and enjoyment of which were largely due to the efforts of Mr. Adams.

Another loss to the Society has been the death of Mr. L. H. Dibblin, which occurred after a long illness, on 3rd November. Mr. Dibblin, Chief Sanitary Inspector for Willesden, was a member of the Executive Committee of the Society and Chairman of the Executive Committee of the Greater London Advisory Council for Smoke Abatement.

We also regret the deaths during the year of another valued friend and Council member, Mr. A. Lindsay Forster, of Glasgow, and of Dr. F. J.

W. Whipple, a member who will have been known to many as an eminent meteorologist and a former Director of Kew Observatory.

General Meeting and Conference.

The first General Meeting and Conference to be held since the outbreak of war took place at the Caxton Hall, London, on 5th November, 1943. The attendance of 226 was greater than at any pre-war conference except that at the Science Museum in 1936.

The chief feature of the meeting was the election of Mr. Melland as President of the Society in succession to Dr. H. A. Des Voeux, who died last year. Mr. Melland has been closely associated with the movement for over thirty years, and at one time was Chairman and Hon. Treasurer, first for the Smoke Abatement League and then for the present Society. He retired from the Chairmanship some years ago, but has continued to act as Hon. Treasurer until now. It is known that his election has been warmly welcomed by the many members and friends who know and appreciate the great work he has done for the movement.

Sir Lawrence Chubb, who was Secretary to the Coal Smoke Abatement Society from its early days at the beginning of the century until its amalgamation with the League in 1929, and who since then has acted as Hon. Advisory Secretary to the present Society, was elected Hon. Treasurer in succession to Mr. Melland.

The following were elected and have consented to become new Vice-Presidents: Viscount Samuel, Lord Horder, A. C. Bossom, Esq., M.P., E. H. Keeling, Esq., M.C., M.P., Dr. R. Veitch Clark and W. Asbury, Esq. Newly elected members of the Council are Col. W. A. Bristow, Major H. J. Gillespie, V. W. Dale, Esq., and Leslie Hardern, Esq.

The General Meeting was followed by a Conference on "Measures for Smoke Prevention in Relation to Plan for Post-War Reconstruction." This was opened by a paper by Mr. Clough Williams-Ellis, and read in his absence by the Secretary, followed by a statement on behalf of the Executive Committee, presented by the Chairman, Mr. Charles Gandy. The afternoon session of the Conference took the form of a discussion in which some twenty speakers took part.

Membership and Finance.

The "slump" in membership caused by the war was never so pronounced as it was feared it might be, and the downward trend has now been arrested, and, indeed, there is again an increase in both membership and subscriptions, which, though as yet small, is evidence of the enduring interest taken in smoke abatement. Reference to the financial statement will show an increased income for the year, and an increase in the reserves and investments. This is satisfactory, but it must be emphasised that the need may arise—is indeed almost certain—in the very near future for the bold expenditure of much of these reserves, and for making strenuous efforts to raise the income level well above its present inadequate total. The opportunities that are likely to present themselves in the next two or three years are such that a great deal may depend upon whether or not the Society can develop its work unhampered by financial restrictions and anxieties so disproportionate to the importance of the work being attempted.

The Executive Committee has set up a Finance Sub-Committee to consider ways and means for substantially raising the level of the Society's income. Attention may be drawn to the article appearing in the Autumn-Winter, 1943, issues of *Smokeless Air*, in which possible lines of development of the Society's work and the need for raising the income to at least £10,000 a year are discussed.

Whatever the particular form of appeal that may be made in the near future we shall be most grateful to any members who can see their way substantially to increase their subscriptions during the next few years.

Members who are unable to do this can nevertheless increase the value of their present subscriptions to the Society by entering into a covenant to continue their subscriptions for a period of seven years or more. This enables the Society to claim, for its own use as a "charity," the income tax that has been paid on the amount subscribed. Particulars of this scheme will be found on page 11 of this Report.

CHARLES GANDY, *Chairman.*

LAWRENCE CHUBB, *Hon. Treasurer.*

ARNOLD MARSH, *General Secretary.*

CONSTITUTION OF THE SOCIETY

1. **NAME.**—The Society shall be called the National Smoke Abatement Society.

2. **OBJECTS.**—The Society shall be concerned with the prevention of air pollution generally, and in particular that arising from coal smoke.

The objects of the Society shall be :

- (a) To create an informed public opinion on the evils of air pollution.
- (b) To inquire into and, if thought advisable, assist investigations directed towards the abolition of smoke, whether industrial or domestic.
- (c) To take steps to popularize the use of smokeless methods of heat and power production.
- (d) To promote and support legislation for preventing the pollution of the atmosphere.

3. **MEMBERSHIP.**—The Society shall consist of :—

- (a) Life Members.
- (b) Members.
- (c) Associates.
- (d) Affiliated Members.

Life Members.—A donation of not less than twenty-five guineas paid in one amount by any individual, shall constitute the donor a member for life.

Members.—An Annual Subscription of not less than half a guinea in the case of an individual, or one guinea in the case of a commercial firm, shall constitute the subscriber a member. A commercial firm registered as a member shall be entitled to nominate a representative to exercise the privileges of membership as regards attendance at meetings, voting, etc.

Associates.—An Annual Subscription of not less than five shillings shall constitute the subscriber an Associate.

Affiliated Members.—The payment of not less than one guinea by any Local Authority, Society or Institution, shall constitute the subscribing body an Affiliated Member. The Affiliated Member shall be entitled to appoint two representatives to the Council of the Society, who shall receive the privileges of full membership of the Society.

4. **PRIVILEGES OF MEMBERSHIP.**—The privileges of membership shall include :—

- (a) Advice and assistance in questions relating to smoke abatement and fuel economy as far as the circumstances of the Society will permit.
- (b) Free admission to lectures arranged by the Society.
- (c) The right to receive free of cost, the general publications of the Society as they appear, including the Journal of the Society. Associates shall not, however, receive the Journal and such other literature as may be decided upon from time to time.

5. **THE COUNCIL.**—The Council of the Society shall consist of the Officers, the members of the Executive Committee, two representatives from each Affiliated Member, together with not more than thirty members to be elected annually at the General Meeting.

The business of the Council shall be to direct the policy of the Society in general and to receive any periodical reports from the Executive or other Committee.

The Council shall meet at such times and places and for such purposes as the Executive Committee shall arrange, and shall also be convened on a requisition signed by not less than three of its members stating the purpose for which such meeting is required.

6. **THE EXECUTIVE COMMITTEE.**—The Executive Committee shall consist of the Officers and not less than twelve members or representatives of Affiliated Members, who shall be elected annually at the General Meeting of the Society. The Executive Committee shall have power to appoint Sub-Committees, and to co-opt additional members. Five shall form a quorum.

The Committee shall meet as required, and the place of meeting shall be at the central offices of the Society, or other place at the discretion of the Committee.

The business of the Committee shall be to manage the affairs of the Society.

7. **OFFICERS.**—The Officers of the Society shall be President, Vice-President and Honorary Treasurer, to be elected annually. The Chairman of the Committee and of the Council, shall also be Officers, but shall be elected by their respective Committees.

8. **GENERAL MEETING.**—The General Meeting of the Society shall be held annually at which shall be presented the Annual Report and the Audited Financial Statement, and at which the Officers, the Council and the Executive Committee for the following year shall be elected. Other general meetings shall be held on the requisition of the Council or Executive Committee, or of 20 members of the Society. One month's notice shall be given of all General Meetings.

9. **ALTERATION TO CONSTITUTION.**—No change shall be made in the constitution of the Society, except by a two-thirds majority of the members present and voting at the Annual Meeting or at a Meeting called specially for the purpose. A notice in writing of any resolution to be submitted for this purpose must be sent to all members of the Society at least a fortnight before the Annual or Special General Meeting.

10. **ACCOUNTS.**—Accounts shall be kept of all moneys received and expended by the Society, and once at least every year the accounts of the Society shall be examined and the correctness thereof certified by a qualified auditor.

11. **BRANCHES.**—Branches of the Society shall be constituted, as far as possible, in the towns or districts of the United Kingdom, to deal with local smoke abatement and air pollution problems. Branches shall settle their own constitution and terms of membership, but shall pay an affiliation fee of at least sixpence for every individual member, and of two shillings and sixpence for every firm affiliated to the National Society, except in the case of members who are also members of the National Society. Members of the Branches who are not also members of the National Society shall be entitled to attend the General and other meetings of the Society, but shall not be entitled to vote thereat. The Branch shall, however, appoint two delegates to the Council of the National Society and to the Annual General Meeting, who shall have full voting powers.

12. **JOURNAL AND LITERATURE.**—A copy of each issue of the Journal of the Society, together with all other current general literature shall be sent free to each member and delegate from each Affiliated Member; to the Town Clerk of each Affiliated Local Authority, and to the Secretary of each Affiliated Society or Institution.

13. **INTERPRETATION OF CONSTITUTION.**—The interpretation of these rules, together with any question on which the rules are silent, shall be decided by the Executive Committee until the next Annual General Meeting.

INFORMATION CONCERNING THE SOCIETY

The National Smoke Abatement Society was formed in 1929 by the amalgamation of the Coal Smoke Abatement Society (1899) and the Smoke Abatement League of Great Britain (1909). It is an organisation dependent entirely upon voluntary support, and its objects and conditions of membership will be found in the Constitution below.

Offices—Central (General Secretary's)
Offices : Chandos House, Buckingham Gate, Westminster, S.W.1.
'Phone : ABBey 1359.
Scottish Branch : City Chambers, Glasgow.
North-Western Branch : 1b, Cooper Street, Manchester.

Lectures, Lantern Slides, Exhibits, etc.—

Normal services are at present largely in abeyance, but inquiry is welcomed and every effort will be made to co-operate in any arrangements that it may be desired to make.

Posters.—The following posters are available : Slogan posters, 30 in. by 20 in. (four kinds), at 4d. each. Large pictorial posters, five in set, for use on ex-E.M.B. frames, at 7/6 per set. New photo-colour poster, 30 in. by 20 in., at 6d. each.

Information and Advice.—The Society is glad, at any time, to be of assistance to any person requiring information on smoke abatement and related matters.

THE COVENANT SUBSCRIPTION SCHEME

Particulars of the scheme that enables you to increase, without extra cost, the benefit of your subscription to the Society. We invite you to consider it.

For the purpose of the scheme the Society is recognised as a "charity" by the Commissioners of Inland Revenue, and it may claim for its own use the amount of the income tax that has been paid on the subscriptions it receives, provided that the subscriber has signed an agreement to subscribe a stated sum annually for a period of at least seven years.

Thus, if a member agrees to subscribe £5 a year, this amount is considered as what remains after a larger gross sum has been taxed, and the Society is able to claim the difference. With income tax at 10/- in the £ the gross amount is £10, and the Society thus receives £5 from the authorities. The benefit to the Society is therefore doubled at no further cost to the subscriber. A lower rate of tax would reduce the amount so recovered, but an increased benefit to the Society remains.

The only obligation into which the subscriber enters in order to assist the Society in this way is to covenant to continue the subscription for a minimum period of seven years, or during his life, which ever period should be shorter.

After the covenant has been signed the subscriber is not required to take any further action other than duly forwarding his annual subscription (or more conveniently paying it by

Banker's Order) and signing an Inland Revenue certificate which will be sent to him each year by the Society, to the effect that the subscription has in fact been paid and has been drawn from his "general fund of taxed income." The certificate will show the gross amount from which tax has been deducted, and the subscriber will be entitled to show such gross amount as a "charge" in his return of income for tax purposes, an advantage some will appreciate.

A specimen form of covenant is given below. Such a document may be prepared on plain paper by the subscriber, and, after being signed and witnessed, sent to the Society. If preferred, the Society will prepare and forward a document on receipt of the particulars required (i.e., name in full, address in full, description or occupation, and the amount to be paid annually to the Society). The required stamping of the document will be attended to by the Society.

It will be noted that the gross amount concerned varies according to the rate of income tax, but that the sum that the subscriber pays direct to the Society does not alter. It is this sum that is stated in the covenant.

The specimen is in the form required by individuals, but corporate bodies will no doubt be able to modify it as may be required.

SPECIMEN OF COVENANT.

I (name) of
(address) (description or occupation)
HEREBY COVENANT with the National Smoke Abatement Society, of Chandos House, Buckingham Gate, in the City of Westminster, that for a period of seven years from the first day of 194....., or during my life which ever period shall be shorter, I will pay annually to the said Society such a sum as will after the deduction of income tax at the rate for the time being in force amount to the sum of (amount in words), such sum to be paid from my general fund of taxed income.

IN WITNESS whereof I have hereunto set my hand and seal this day of 194.....

Signed, sealed and delivered by the said
..... in the presence of
Signature (witness) (Signature)
Address
Occupation

SUBSCRIPTIONS AND DONATIONS

for the year ended 30th June, 1943

	£	s.	d.		£	s.	d.
Acton Corporation	1	1	0	Brighton Corporation	1	1	0
Acworth, A. W.	0	10	6	Brighton, Hove & Worthing Gas Co.	3	3	0
Acworth, Miss E. A.	1	1	0	Bristol Gas Co.	2	2	0
Acworth, Miss W. B.	2	2	0	Bristol Corporation.....	1	1	0
Adam, W. Wakefield	1	1	0	British Commercial Gas Association	50	0	0
Adwick-le-Street U.D.C. ...	1	1	0	British Medical Association	1	1	0
Affleck & Brown Ltd.	2	2	0	British Electrical & Allied Manufacturers' Assoc. ...	5	5	0
Ashwell & Nesbit Ltd.	0	5	0	British Electrical Develop- ment Association	100	0	0
Altrincham Gas Co.	1	1	0	British Gas Light Co. Ltd....	2	2	0
Alston, Dr. J. M.	0	10	6	British Insulated Cables Ltd.	1	1	0
Andrew, W. H.	0	10	0	Brown, G. L.	1	1	0
Angus, Col. E. G.	1	1	0	Bullwinkle, C.	0	10	6
Anonymous	1	0	0	Burnley Gas Dept.	2	2	0
Ascot Gas Water Heaters Ltd.	10	10	0	Burnley Corporation	2	2	0
Ashton Bros. & Co. Ltd. ...	2	2	0				
Ashton-under-Lyne Corp....	1	1	0	Cablemakers' Association ...	10	10	0
Atkinson, Mrs. M.	1	0	0	Cadbury Bros.	2	2	0
				Cadbury, Mrs. G. W.	1	1	0
Barber, Stanley S.	0	10	0	Camberwell Corporation ...	1	1	0
Banbury Gas Light & Coke Co.	1	1	0	Cambridge University & Town Gaslight Co.	1	1	0
Barlow, Sir Thomas, Bart., M.D.	0	10	6	Cannock District Gas Co. Ltd.	1	1	0
Bastion & Allen Ltd.	1	1	0	Capper-Johnson, Dr. L.....	0	10	6
Barrow, Harrison	0	5	0	Cardiff Corporation.....	1	1	0
Bath Corporation	1	1	0	Cardiff Gas Light & Co.....	1	1	0
Bath Gas Co.	1	1	0	Castleford U.D.C.	1	1	0
Batley Corporation	1	1	0	Chantler, Philip	0	15	0
Bayes, Mrs. Madge	0	10	6	Charlesworth, Mrs.	0	5	0
Baxendale & Co. Ltd.	2	2	0	Charrington, Gardner & Lockett Co. Ltd.	0	10	6
Beard, E.	1	1	0	Cheltenham & Dist. Gas Co.	1	1	0
Beard, J. R.	1	1	0	Chester-le-Street R.D.C. ...	1	1	0
Beit, Sir Alfred, M.P.	1	1	0	Chester Corporation	1	1	0
Bennett, M. J.	1	0	0	Chingford Corporation	1	1	0
Bethnal Green Corporation	1	1	0	Chester United Gas Co.....	2	2	0
Bibby, Mr. & Mrs., H. P. ...	2	0	0	Chorley Corporation	1	1	0
Bibby, J., & Sons Ltd.	5	0	0	Chubb, Sir Lawrence	0	10	6
Bingley U.D.C.	1	1	0	Clarke, Dr. R. T.	0	10	6
Birkenhead Corporation ...	2	2	0	Clarke, David K.	0	10	6
Birmingham Corporation ...	5	5	0	Clayton, R. H.	2	2	0
Birmingham Corporation Gas Dept.	5	5	0	Clegg, Ernest	0	10	6
Bognor Gas & Electricity Co.	1	1	0	Clevedon & Yatton Gas Co.	1	1	0
Bolton Corporation.....	1	1	0	Clinch, H. G.	0	10	6
Bonner, J. R. (1942)	0	5	0	Coal Utilisation Jt. Council	10	0	0
Bonner, J. R. (1943)	0	5	0	Cooper, Miss Irene	0	10	6
Bonstow, T. L.	0	10	6	Coke Oven Managers' Assoc.	1	1	0
Bootle Corporation	2	2	0	Coote & Warren Ltd.	1	1	0
Bournemouth Gas & Water Co.	2	2	0	Croydon Gas Co.	5	5	0
Bradford Gas Dept.	1	1	0				
Bradshaw, Miss Grace	0	5	0	Day, G. W.	0	5	0
Bray, George, & Co.	1	1	0				
Brighouse Corporation	2	2	0				

	£	s.	d.		£	s.	d.
Davies, D. E.	0	10	6	Hallas, W. H.	0	10	6
Deakin, Herbert	0	10	6	Halifax Corporation	2	2	0
Denton U.D.C.	1	1	0	Hammersmith Corporation..	1	1	0
Dixon, Thomas	0	10	6	Hancock, Arthur.....	0	10	6
Dobson, Dr. G. M. B.....	1	1	0	Hardy, G., & Co.	2	2	0
Doncaster Corporation	1	1	0	Harris & Co. Ltd.	1	1	0
Dudley, Brierley Hill & District Gas Co.	1	1	0	Harrogate Corporation	2	2	0
Duguid, Mr. & Mrs. S.	1	1	0	Harrogate Gas Co. (1942) ...	1	1	0
Durham R.D.C.	1	1	0	Harrogate Gas Co. (1943) ...	1	1	0
Ealing Corporation	1	1	0	Hartlepool Gas & Water Co.	1	1	0
Easington R.D.C.	1	1	0	Hartley, George E.	0	5	0
East Cowes Gas Co.	1	1	0	Hay, Dr. John.....	1	1	0
Eastbourne Gas Co.	2	2	0	Hayes & Hartington U.D.C.	1	1	0
Edmonton Corp. (1941).....	1	1	0	Heanor U.D.C.	1	1	0
Edmonton Corp. (1942).....	1	1	0	Hebden Royd U.D.C.....	1	1	0
Elwell, Mrs. E.	0	10	6	Herbert, Alfred, Ltd.....	1	1	0
Elland Gas Company	1	1	0	Herford, Miss Amy C.	0	10	0
Elsworthy, J. Gordon	1	11	6	Herne Bas Gas Co.....	1	1	0
Exeter Gaslight & Coke Co.	2	2	0	Heston & Isleworth Corp....	2	2	0
Failsworth U.D.C.	1	1	0	Hexham Gas Co.	1	1	0
Farnworth Corporation	1	1	0	Heywood Gas Dept.	1	1	0
Felling U.D.C.	1	1	0	Holborn Corporation	1	1	0
Finsbury Corporation.....	1	1	0	Holbrook, Col. Sir Arthur...	1	0	0
Fletcher, G. H.	1	1	0	Holmes, W. C. & Co. Ltd....	5	5	0
Foss, Mrs. Allison	0	10	6	Horde, The Rt. Hon. Lord	1	1	0
Fox, Frank	0	10	0	Houghton-le-Spring U.D.C.	1	1	0
Fox, Capt. F.	0	10	6	Howden, James & Co. (Land) Ltd.	1	1	0
Fry, Miss Agnes	0	10	6	Huddersfield Corporation...	1	1	0
Fry, Miss A. Ruth	1	1	0	Hull Corporation.....	1	1	0
Gandy, Charles	5	0	0	Hutchinson, G. H.	0	10	6
Gandy, Miss R. L.	0	10	6	Hyland, Alfred	0	10	0
Gandy, Mr. & Mrs. Henry...	1	1	0	Ideal Boilers & Radiators Ltd.	5	5	0
Ganter, Douglas	0	10	6	Institution of Electrical Engineers	10	10	0
Gas Chambers & Coke Ovens Ltd.	1	1	0	Institution of Gas Engineers	52	10	0
Gas Companies' Protection Association	10	10	0	Institution of Heating & Ventilating Engineers ...	3	3	0
Gas Consolidation Ltd.	1	1	0	International Combustion Ltd.	1	1	0
Gas Light & Coke Co.....	52	10	0	Ipswich Gas Light Company	1	1	0
Gateshead Corporation	1	1	0	Irlam U.D.C.	1	1	0
General Electric Co. Ltd. ...	5	5	0	Jast, Mrs. L. Stanley.....	0	10	6
Gillison, Dr. J. A.	0	10	0	Johnston, Sidney	0	5	0
Glasgow Gas Dept.	5	5	0	Kay, Miss Doris	0	5	0
Gloucester Corporation	1	1	0	Keeley, Robert	0	10	0
Gloucester Gas Light Co. ...	1	1	0	Keene, C. E.	0	10	6
Godalming Gas & Coke Co.	1	1	0	Keighley Corporation	1	1	0
Graucob Ltd.	1	1	0	Kensington Corporation ...	1	1	0
Gravesend Corporation	1	1	0	Kidderminster Corporation..	1	1	0
Great Grimsby Gas Co.....	1	1	0	Kidsgrove Gaslight Co.	1	1	0
Great Yarmouth Gas Co....	2	2	0	Lacey, Stephen	2	2	0
Greenwood, T. A. S.	0	10	0	Lancaster Corporation	2	2	0
Gregory, Dr. Arnold	0	5	0	Langford, A. S.	0	10	6
Grimsby Corporation	1	1	0	Lapage, Dr. C. P.	0	10	6
Guildford Gas Light & Coke Co.	2	2	0				
Gurney, John	1	1	0				

	£	s.	d.		£	s.	d.
Lea Bridge District Gas Co.	3	3	0	McGlynn, E. P.	0	10	6
Lee, Miss Dora C.	2	2	0	McHugh & Co.	0	5	0
Leeds Corporation	10	10	0	McLachlan, T. (1942)	0	10	6
Lee, Sir Kenneth	1	1	0	McLachlan, T. (1943)	0	10	6
Leicester Corporation	10	10	0	Macmillan, Dr. A. M. (1942)	0	10	0
Leicester Gas Dept.	3	3	0	Macmillan, Dr. A. M. (1943)	0	10	6
Leominster Gas & Coke Co.				McWilliam, Dr. H. H.	0	10	6
Ltd.	1	1	0	National Gas Council	52	10	0
Lees, Miss Majory	1	1	0	Newcastle-under-Lyne Corp.	1	1	0
Lessing, Dr. R.	1	1	0	Newcastle-upon-Tyne Corp.	2	2	0
Leyton Corporation	1	1	0	Newcastle & Gateshead Gas			
Lincoln Corporation	2	2	0	Co.	1	1	0
Liptak Furnace Arches Ltd.	1	1	0	Newport (Mon.) Gas Co.	1	1	0
Littleborough Gas Co.	1	1	0	Nicholson, Philip B. (1942)	0	10	6
Lister, B. S.	1	0	0	Nicholson, Philip B. (1943)	0	10	6
Liverpool Gas Company	10	10	0	North Middlesex Gas Co.	2	2	0
Liverpool Corporation	10	0	0	Nottingham Corporation	5	5	0
London & Counties Coke Ass.	26	5	0	Oxford & District Gas Co.	1	1	0
London Electricity Supply				Oxford Corporation	2	2	0
Association	10	10	0	Oldham Gas Dept.	2	2	0
London Power Co.	1	1	0	Oldham Corporation	5	5	0
Long Eaton Gas Co.	1	1	0	Parkinson, B. R.	0	7	6
Longley, J. A.	1	1	0	Pearson, Dr. S. Vere	0	10	0
Lowestoft Water & Gas Co.	2	2	0	Polding, Wm. W.	0	10	6
Ludlow Union Gas Co. Ltd.	1	0	0	Pontefract Bros. Ltd.	1	1	0
Luton Corporation	2	2	0	Portsmouth & Gosport Gas			
Luton Gas Co.	2	2	0	Co.	1	1	0
Maidstone Gas Co.	1	1	0	Preston Corporation	1	1	0
Malden & Coombe Corp.	1	1	0	Pudsey Corporation	1	1	0
Manchester Corporation	26	5	0	Radcliffe Corporation	1	1	0
Manchester Electricity Dept.	2	2	0	Rathbone, Philip R.	0	10	6
Manchester Gas Dept.	5	5	0	Redditch Gas Co.	1	1	0
Manger, J., & Son Ltd.	0	10	6	Refuge Assurance Co.	5	5	0
Mansfield Corporation	1	1	0	Rhondda, Lady	0	10	6
Margolis, A. E.	0	10	6	Richmond Corporation	1	1	0
Marshall, G. C.	0	5	0	Roberts, Evan, Junr.	0	10	6
Mather, L. E.	1	1	0	Roberts, John M. (1942)	0	10	6
Matthews, Mrs. M.	0	10	6	Roberts, John M. (1943)	0	10	6
Melland, Will.	2	0	0	Robinson, Mrs. Blanche F.	1	1	0
Melland, Mrs. Will.	1	1	0	Robinson, Mrs. Edward	1	1	0
Melton Mowbray Gaslight &				Rochdale Corporation	3	3	0
Coke Co.	1	1	0	Rogers, Phil	2	2	0
Merton & Morden U.D.C.	2	2	0	Rothwell U.D.C.	1	1	0
Mid-Kent Gaslight & Coke				Rowley Regis Corporation	2	2	0
Co.	1	1	0	Royton U.D.C.	1	1	0
Midlands Joint Advisory				St. Helens Corp. (1942)	1	1	0
Council for Smoke Abate-				St. Helens Corp. (1943)	1	1	0
ment	1	1	0	Salford Gas Committee	2	2	0
Mill, Dr. L. M. D.	1	0	0	Salford Corporation	1	1	0
Moon, Edward R. P.	0	5	0	Sanger, Mrs. A. D.	0	5	0
Moore, S. H.	0	10	6	Sanitary Inspectors' Assoc.	1	1	0
Millar, A. Walker	0	5	0	Scarborough Corporation	1	1	0
Mirfield U.D.C.	1	1	0	Scarborough Gas Co.	1	1	0
Morley Corporation	1	1	0	Scottish Branch N.S.A.S.	6	6	0
Morgan, D., & Sons	1	1	0	Scott Park, Dr. & Mrs. S. D.	0	10	6
Muirhead, W.	1	0	0				
Munro, Mrs. M. A.	0	10	6				
McDougall, A.	2	2	0				

Income and Expenditure Account year ended 30th June, 1943.

INCOME		1942		1943		1942		1943	
	£	s.	d.	£	s.	d.	£	s.	d.
Subscriptions	1,015	0	0	1,092	18	0	503	8	6
Sale of Literature	15	14	8	12	17	6	61	7	2
Repayment of Income Tax	—	—	—	18	6	0	53	19	7
Donation to Staff Pension Scheme—Scottish Branch...	—	—	—	10	0	0	27	0	7
DIVIDENDS FROM INVESTMENTS, ETC.—	—	—	—	—	—	—	90	12	1
Commercial Union Assurance Co.	4	5	8	£4	5	7	127	7	9
London, Midland & Scottish Rly. Co.	6	5	2	6	5	2	98	0	0
Interest, Manchester & Salford Savings Bank.....	8	5	3	8	9	7	—	—	—
Sundry Receipts	1	13	4	19	0	4	89	8	5
				0	17	1			
	£1,051	4	1	£1,153	18	11			
							£1,051	4	1

Defence Bond Fund.

	£	s.	d.	£	s.	d.	£	s.	d.
Balance, June 30th, 1942	260	5	0	400	2	1	400	2	1
Transfer from General Bank Account.....	50	0	0	—	—	—			
Interest	8	13	1	13	5	6			
Donations	81	4	0	31	0	6			
	£400	2	1	£444	8	1	£400	2	1
							£444	8	1

Balance Sheet, 30 June, 1943.

	£	s.	d.	£	s.	d.	£	s.	d.
SURPLUS—									
Balance as at June 30th, 1942	1,355	14	3	1,395	2	8	205	11	0
Add Surplus of Income over Expenditure	89	8	5	164	13	3	279	5	11
	1,445	2	8	1,559	15	11	314	16	9
Less Transfer to Defence Bond Fund ...	50	0	0	—	—	—			
DEFENCE BOND FUND—									
Balance	400	2	1	444	8	1	635	9	0
Pegasus Trust—							400	0	0
Donation to Film Competition held in abeyance ...	40	0	0	40	0	0	0	2	1
	£1,835	4	9	£2,044	4	0	£1,835	4	9
							£2,044	4	0

Audited and found correct.
(Signed) ABBOTT & SON, Chartered Accountants,
40, South King Street, Manchester.

September 24th, 1943.

GENERAL PUBLICATIONS

(Post free except where stated).

Smokeless Air. The Society's quarterly Journal. Regular publication is being maintained though the size has temporarily been reduced. The only magazine in the world devoted to the problems of atmospheric pollution. Gratis to members or 2/6 per annum, post free.

The Law of Smoke Nuisances. By W. R. Hornby Steer, M.A., LL.B., Recorder of South Molton, Standing Counsel to the Society. This book, based on an earlier work by Randolph A. Glen and revised and extended in accordance with the Public Health Acts of 1936, is likely to be accepted as a standard work on the subject. In addition to the explanatory chapters, it contains tables of statutes and cases and the relevant sections from the two Acts and the Local Government Act, 1933. 8vo., 65 pages. 1/- paper-backed; 2/6 cloth bound.

The Case Against Smoke. A booklet which is intended to give the reader a clear understanding of the nature and extent of the smoke nuisance by means of passages from a number of writers and speakers, each of whom may be regarded as an authority in his own sphere. There are also figures and extracts from official reports and tables. 24 pages, 4to. Price 3d.

Science Museum Exhibition :

Handbook. This is not only a detailed guide to the Exhibition, but, containing a series of twelve authoritative articles on the main aspects of the problems, is a permanent and useful reference book. 80 pages, medium 8vo. Price 6d.

Conference Report. The most complete review of the problem to be published for many years. Twelve papers and discussions in full. 116 pages, 4to. Price 2/-.

Fumifugium : or the Smoke of London Dissipated. By John Evelyn. This rare and fascinating book, first published in 1661 by command of

Charles II, has been republished by the Society with an introduction by Rose Macaulay. In spite of its age this indictment of the smoke evil by the author of the famous Diaries remains true, witty and penetrating. Illustrated with original wood engravings and a portrait of Evelyn. Paper covers, 6d. Cloth-bound, 1/6.

The State of the Atmosphere. A valuable and informative paper by the late Sir Frank Baines, F.R.I.B.A. With a section on the effects of smoke upon building stone. Royal 8vo, pp. 36. Price 6d.

Smoke and Fumes Nuisances from Road Vehicles. The technical and scientific aspects by Dr. J. S. Owens, A.M.Inst.C.E., M.I.Mech.E., and the legal position by R. P. Mahaffy, M.A. 16 pages, 8vo. Price 3d.

Smoke and Aviation. Full report of a special conference on this subject. Four papers and discussions. Illustrated. 40 pages, 8vo. Price 6d.

Smoke Abatement and Fuel Economy. In steam boiler practice. Published by the Manchester and District Regional Smoke Abatement Committee. 12 pages. Price 1d. By post, 2d.

Britain's Burning Shame. This pamphlet has been described in a review as "a masterpiece of modern popular propaganda." It puts the smoke problem in its simplest terms, especially as it affects the home, and is profusely illustrated. Single copies, 2d. 12/6 per 100.

Conference Proceedings. Copies are available at 1/- each of the full reports, containing papers and discussion of conferences held in 1932, 1934, 1937, and 1938.

Smoke Emission Chart. A chart of tinted diagrams of different intensities of smoke, for making observations of chimney emissions. The grades shown are pale grey, grey, black and dense black. 3d. each, 2/6 per dozen.

(See inside front cover for post-war planning publications).

GIVE US THE TOOLS

We all know how, in the earlier days of this war, opportunities for successful action and chances that would have brought nearer final victory, had to be foregone simply because there were not the arms and equipment in the right amounts and at the right time. Without the tools the job could not be finished.

In many fields of activity there come opportunities that are lost simply because something essential is absent or inadequate, or comes too late. This experience, with the sense of frustration it brings, comes frequently to the Society. Every day, almost, there appear chances for progress in new directions, for new developments here, for intensified work there . . . chances lost because we have not the tools.

The tools we need are many, but they all come back to that first essential—money. On its present funds, in short, the Society can only hobble where it might run, and can only tap where it might strike resounding blows. Today, on the eve of an immense programme of Reconstruction, with all its possibilities for radical progress, we are only doing a tenth of what we could do. The conclusion is obvious: we must increase our resources ten-fold.

Can you, in any way that may be possible for you, help us to achieve this object?

NATIONAL SMOKE ABATEMENT SOCIETY

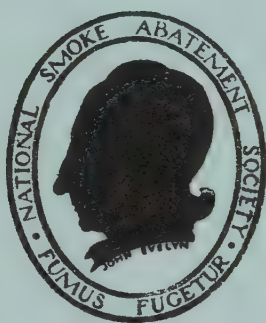
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“THE AIR’S GOOD CAUSE”

C 32.

15TH ANNUAL REPORT



NATIONAL SMOKE ABATEMENT SOCIETY 1 9 4 5

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Affiliated Societies and Local Authorities with Representatives appointed to the Council	2
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Price : TWOPENCE

The Society's Publications on POST-WAR RECONSTRUCTION

Memorandum on Smoke Prevention in Relation to Initial Post-War Reconstruction.

The Memorandum submitted by the Society to the Government Department concerned, which sets forth proposals by means of which, it is claimed, practically the whole of the post-war building could be made smokeless. 24 pages. By post, 2d.

Design and Equipment in Post-War Housing in Relation to Smoke Prevention.

A memorandum submitted by the Society at the invitation of, and to, the Design of Dwellings Sub-Committee of the Ministry of Health's Central Housing Advisory Committee. 8 pp. 2d.

No Clean City.

An illustrated pamphlet showing the need for smoke prevention in post-war reconstruction. This is in effect a supplement to the memoranda described above. 16 pages. By post, 2d.

Plan for Clean Air.

An easily read outline of the Society's Proposals and the "Ten Year Plan" in the form of a "quiz" of twenty questions and answers. A useful publication to hand to the uninformed. 6 pages. By post, 2d.

Proceedings of the London Conference, 1943.

A complete report of the Conference on "Smoke Prevention in relation to Plans for Post-War Reconstruction" held in London on 5th November, 1943. 24 pages, 1/-. 9/- per dozen.

These publications are available in quantity at reduced prices. 1/6 per dozen; 10/- per 100. We invite local authorities and others to help in their effective distribution.

Other publications listed inside back cover.

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Ealing : Dr. Thomas Orr, Mr. W. H. Crowe. **East Ham** : J. E. Austin, Ald. Mrs. Taylor. **Easington** : Cr. W. Luke, J. W. Gray. **Edmonton** : Cr. L. E. Berridge, Cr. Mrs. A. M. Glover.

Failsworth : Cr. W. Hunt, Cr. F. Yarwood. **Farnworth** : Cr. A. H. R. Willis, Cr. Helme. **Felling on Tyne** : Cr. T. Smith, R. J. McLaren. **Finchley.** **Finsbury** : Ald. C. W. E. Drew, Dr. A. B. Stewart. **Fulham** : Cr. F. S. J. Ballantyne.

Gateshead : Ald. P. S. Hancock, Cr. G. Robertson. **Gloucester** : Dr. Charles Cookson. **Gravesend** : Ald. H. A. Hodge, Ald. G. E. Morris. **Greenwich** : Cr. Mrs. J. Gollogly, Cr. Mrs. A. Kennedy. **Grimsby** : Ald. E. S. Rudkin, Ald. W. Thickett.

Hackney : Ald. Mrs. C. Gooch. **Halifax** : J. W. Beaumont (Executive), Dr. C. G. F. Roe. **Hammersmith** : Cr. Turner. **Harrogate** : Sir Harold Middlebrook, Bart. **Harrow** : Cr. C. E. Brady, Mr. A. B. Kramm. **Hayes and Harlington** : Cr. D. Page, Cr. P. G. Soulsby. **Heanor** : Cr. J. W. Lilley, Andrew A. Wilson. **Hereford** : Cr. T. Lindsey Price, J. Leach. **Heston and Isleworth** : Ald. Collar, Dr. A. Anderson. **Holborn** : Cr. Mrs. Mary A. Chance, Cr. William Woods. **Hornchurch** : Cr. W. H. F. Webb, Cr. W. G. Bunch. **Horwich** : James Seddon, Cr. J. Carr. **Houghton-le-Spring** : Cr. J. A. Hall. **Huddersfield** : Cr. J. W. B. Johnson, Cr. R. H. Browne. **Hull** : Ald. W. Turner, Cr. E. Chapman. **Hyde** : Cr. Mrs. M. Bayes, Cr. Wm. Marshall.

Irlam : Cr. J. G. Enticott, L. F. Atherton.

Keighley. **Kensington.** **Kidderminster** : Cr. F. Wilson. **Kirkby-in-Ashfield.**

Lambeth : Cr. A. Halligan, Dr. A. G. G. Thompson. **Lancaster** : Ald. W. M. Simpson, Dr. E. Hughes. **Leeds** : Dr. J. Johnstone Jervis

(Executive), C. H. Manley. **Leicester** : Ald. Parbury. **Leyton** : Cr. G. S. Flack, Cr. E. A. Rigg. **Lincoln** : Dr. Mohan Lal Bery, D. G. McGill. **Liverpool** : Ald. W. T. Lancashire, Ald. W. T. Roberts, Dr. W. M. Frazer (Executive). **Luton** : Cr. W. G. Roberts, Dr. F. Grundy.

Macclesfield : Cr. W. H. Hyde, Mr. A. Albinson. **Malden and Coombe** : Cr. G. G. N. Taylor, H. Tunbridge. **Manchester** : Cr. Professor F. E. Tylecote, Ald. James, Dr. C. Metcalfe Brown, (Executive). **Mansfield**. **Marple** : G. E. H. Keillor, S. Hodgkinson. **Merton and Morden** : Cr. Mrs. H. Cobbett, J. B. Pointon. **Middleton** : Cr. R. Scott, Dr. J. S. G. Burnett. **Mirfield** : Cr. J. H. Barraclough, H. H. Johnson. **Morley**.

Newcastle-under-Lyme : C. A. Wood. **Newcastle - upon - Tyne** : Ald. W. Thompson. **Newton-le-Willows**.

Nottingham : Dr. Cyril Banks, Alfred Wade.

Oldham : Ald. Hallwood, Cr. Marron, Dr. J. T. C. Keddie. **Oxford** : Stewart Swift.

Paddington. **Poplar** : Cr. Mrs. E. Stavers. **Preston** : Ald. R. Durham, Dr. F. A. Sharpe. **Pudsey** : Cr. J. T. Pickard, H. Foster.

Radcliffe : Ald. H. T. Ogden, George Yates. **Rhondda**. **Richmond (Surrey)** : Dr. J. H. Dancy, George Laws. **Rochdale** : Cr. H. Silverwood, Dr. J. Innes. **Rothwell** : Cr. R. Ward, Thomas Wilson. **Rowley Regis** : Cr. A. H. Hancock, Dr. F. Asker. **Royton** : Cr. T. H. Lowe, A. Donald Ogden.

St. Helens : Ald. T. Hamblett, Dr. F. Hauxwell. **Salford** : Cr. W. W. Crabtree, Dr. J. L. Burn. **Scarborough** : Cr. F. W. Dennis, Dr. S. Fox Linton. **Sheffield**, **Rotherham and District Smoke Abatement Committee** : James Law (Executive). **Shipley** : Cr. T. J. Gray, Dr. E. D. Irvine. **Shoreditch** :

Cr. Mrs. D. Thurtle, Dr. E. H. R. Smithard. **Slough** : Ald. A. Darvill, L. A. Stroud. **Smethwick** : Ald. C. G. Kempton, Cr. F. W. Perry. **Southall** : Dr. Margaret A. Glass, R. W. McDonald. **Southampton**. **Southend-on-Sea** : Chairman of the Sainitary Committee. **Southport**. **Southwark** : H. Stillman, Dr. W. Stott. **Spennborough**. **Stafford**. **Stalybridge** : Cr. M. B. Lees, Cr. A. Allen. **Stanley**. **Stepney** : Cr. Mrs. L. Frankel, Dr. F. R. O'Shiel. **Stockton**. **Stoke-on-Trent** : Cr. J. Mooney, Cr. B. Stross. **Stretford** : Cr. J. W. Willoughby, Dr. E. H. Walker. **Sunderland** : Cr. T. H. Blyth, Dr. A. S. Hebblethwaite. **Sutton and Cheam**. **Swindon**. **Swinton and Pendlebury** : Cr. C. E. Ashton, Dr. A. E. Wall.

Tottenham : Ald. A. R. Turner, Dr. G. Hamilton Hogben. **Twickenham** : Cr. Mrs. M. F. Bligh, Cr. C. H. Drake.

Urmston : Cr. H. Stewart. **Uxbridge** : Cr. T. R. Thirtle.

Vereeniging, Transvaal. **Wakefield** : Ald. Mrs. F. W. Stott. **Wallasey** : Dr. R. B. Berry, Ald. D. P. Charlesworth. **Walsall** : C. A. Stansbury. **Walthamstow** : M. E. Duncan. **Wandsworth** : Cr. Parkinson Smith. **Warrington** : Ald. David Plinston, Dr. Stuart F. Allison. **Watford**. **Wednesbury** : Ald. L. Whitehouse. **Wembley** : Cr. W. R. Dudden, R. M. Turner. **West Bromwich** : Ald. J. T. H. Davies, W. W. Foakes. **West Ham** : Cr. Mrs. A. A. Barnes, H. G. Clinch. **Weston-Super-Mare**. **Westminster** : Mrs. Alderson Horne, Dr. A. J. Shinnie. **Whiston**. **Widnes** : Cr. T. Smith. **Willesden** : J. E. Radcliffe.

Wolverhampton : Ald. R. E. Probert, Dr. R. H. H. Jolly. **Wood Green** : Ald. E. J. Anderton, Ald. H. T. Rhys. **Wrexham** : Cr. E. S. E. Hackett, L. A. Stroud.

York : Cr. T. Harwood, F. Fishburn.

Local Authorities Affiliated to the Scottish Branch.

Airdrie, **Clydebank**, **Coatbridge**, **Dumbarton**, **Dundee**, **Edinburgh**, **Falkirk**, **Glasgow**, **Greenock**, **Hamilton**, **Irvine**, **Johnstone**, **Kirkcaldy**, **Kirkintilloch**, **Motherwell** and **Wishaw**, **Paisley**, **Port**

Glasgow, **Rothsay**, **Rutherglen**, **Stirling**, **County Councils of Ayr**, **Dumbarton (Western District)**, **Lanark**, **Renfrew**.

FIFTEENTH ANNUAL REPORT

for the Year ended December 31st, 1944

The year 1944 has seen satisfactory progress towards a general recognition that smoke prevention is a factor that must not be neglected in re. construction. In Government quarters especially there are satisfactory signs of an understanding that substantial progress can and must be made, and smoke abatement at last appears to have been accepted as a matter for direct encouragement. It will no doubt take time for this new attitude to evolve into adequate practical action but the position is increasingly promising, and fully justifies the long-continued efforts of the National Smoke Abatement Society to form, crystallize and guide public opinion.

Official Policy.

The most definite statement of Government policy appears in the Housing Manual, 1944, published by the Ministries of Health and Works. The Manual states :—

"The Government and the industries concerned are alive to the need for developing domestic fuel appliances and installations designed to give greater efficiency and to reduce the emission of smoke. Recently, both together and separately, they have sponsored an increasing volume of research towards this end. There is now a wide-spread demand that the evil of atmospheric pollution shall be resolutely attacked, one of its principal causes being the inefficient combustion of raw bituminous coal in the home. The Government attach particular importance to smoke abatement in view of the injury to health and to general amenities caused by atmospheric pollution. The extra labour of the housewife is another evil result which must not be overlooked."

The Manual also links the prevention of smoke with the efficiency of appliances and this with the need for fuel conservation after the war :—

"As far as solid fuel installations are concerned, when an appliance consumes fuel more efficiently and

more completely, there is less emission of smoke. Some of the solid fuel-burning heat appliances described in this Manual are of this high-efficiency type, and in the interests of smoke abatement as well as of efficiency it is of greatest importance that appliances used in housing shall be selected from this range. . . .

"The importance of good heat services goes far beyond the single family. The mining of coal is costly, both in labour and money, and it is clear that the efficient use of coal (and of gas, coke and electricity, derived from coal) will remain a national necessity in peace as well as in war."

One of the most important recommendations in the Manual, on open fires, is discussed later in this report. The Technical Appendices to the Housing Manual, which was published later, also refers in similar terms to the new types of fire, and the need for smoke abatement is again stressed.

A further document of importance issued by the Ministry of Works is a report on "Solid Fuel Installations." The terms of reference of the Committee responsible included "recommendations for practice in post-war building having regard to reduced emission of smoke from dwellings." The report considers this factor in a satisfactory and comprehensive way and is an important complement to the Housing Manual.

These three publications more than cancel the most unfortunate failure to deal with the question by the Design of Dwellings Sub-Committee of the Central Housing Advisory Committee of the Ministry of Health, to which the Society, by invitation, had submitted a detailed memorandum.

The smoke problem is also dealt with in a generally satisfactory way in the report of the Women's Advisory Committee on Solid Fuel on "Heating, Cooking and Hot Water Supplies for the Post-War Home." The comprehensive report of the Scottish Housing Advisory Committee, on the other

hand, recognized the need for smoke abatement but failed to make any useful suggestions for reducing the evil and appeared prepared to accept the continuance of the present position.

The Minister of Health, the Rt. Hon. H. U. Willink, K.C., M.P., addressed a conference of the Greater London Advisory Council for Smoke Abatement in the House of Commons on 8th May. He said he was very glad to find a revival of activity both on the part of the Council and of the National Smoke Abatement Society, and hoped their campaign would go ahead. "I am very anxious," said the Minister, at the conclusion of his speech, "that we should do all we can not only to have less smoke in our new housing estates in the suburbs, but that we should not run the risk of spoiling the hearts of our cities by making them places where sensible people would prefer not to live."

Other Propaganda.

Among other occasions during the year at which smoke abatement has been discussed may be mentioned two meetings of the Royal Sanitary Institute. At one, in Bolton, Mr. A. C. Saword read a paper on "Clean Air and Practical Politics," and at a London meeting Mr. D. V. H. Smith read a paper on "District Heating and the Smokeless City." The important possibilities of District Heating as a means for the promotion of smokeless air have been emphasized in a number of papers and articles on this subject during the year. The practicability of using it in new housing schemes and reconstructed areas is being considered by a number of local authorities. Mention may be made of a close study of the method made in a series of meetings of a special Technical Sub-Committee on Smoke Abatement and District Heating set up by the Manchester City Council. The Sub-Committee has reported that a *prima facie* case for its adoption has been established.

The West Riding of Yorkshire Regional Smoke Abatement Committee has held a number of meetings and has generally continued its work. This Committee, the Greater London Council, and the one statutory Com-

mittee, for Sheffield, Rotherham and District, are the only municipal organizations that are at present active. It is hoped that circumstances will permit an early resumption of the work of the others, which were making excellent progress up to the outbreak of the war.

The growth of public opinion is reflected in many ways. For example, the replies to a questionnaire sent to Burnley citizens now serving in the Forces on plans for post-war developments had, it was reported, one point in common: "The need to combat Burnley's smoke nuisance." A Services "Parliament" at Gibraltar passed a Smoke Abolition Bill by 32 votes to 15 and set up a committee to consider the quickest means for achieving a smokeless Britain. In a most interesting competition arranged by the Merseyside Civic Society and the Liverpool Daily Post on "Merseyside of the Future" smoke abatement was one of the suggestions most strongly supported, and, to quote a report that has been published, "there were more entrants stressing the need for abolishing smoke than there were entrants stressing the need for abolishing the slums, though these two themes were by far the most popular." In group discussions on the competition smoke abatement was considered from aesthetic rather than medical reasons, and the view is quoted that "a man cannot think cleanly in a pigsty."

Post-War Housing.

Attention during the year has been largely focussed on the important question of ensuring the means for smokeless heating in new houses. It has had to be accepted that it is not immediately practicable to demand such control over appliances and fuels as to prohibit smoke emission from new houses, but it is now both practicable and desirable that all should be equipped with appliances capable of smokeless operation without alteration. This is made possible by, and demands the installation of, the new types of open grate and range in which either smokeless fuels or ordinary coal can be used as desired. The installation of less efficient types would prevent the use of smokeless methods by the increasing number of

people who desire to use them, and would impede future measures for the general encouragement of smokeless heating. Improved designs of grate for the use of smokeless fuels, but suitable also for coal, and a more elaborate form of fire designed to give reduced smoke emission with bituminous coal (and which is equally suitable for smokeless fuel) have been developed during the war.

To ask for the inclusion of such "all fuel" fires in all the new houses was the principal purpose of a deputation from the Society and the Greater London Advisory Council for Smoke Abatement that was received by the Minister of Health on 28th April, 1944. With Mr. Willink was the Parliamentary Secretary of the Ministry of Fuel and Power and representatives of the Ministries of Works and Town and Country Planning. Mr. Keeling and Mr. Gandy were the principal speakers on behalf of the deputation. Following this meeting, further conversations were held with representatives of Government departments, and the Society may justly claim that the results of this and other activity are important and will be fruitful for future developments.

These results are reflected in the recommendations contained in the Housing Manual, which completely accepts the immediate case put forward by the Society. Paragraph 133 of the Manual states :—

"When open fires are to be fitted they should, from the point of view of smoke prevention, either be of a type which burns smokeless fuels (and also bituminous coal), or of a type which burns bituminous coal smokelessly."

The Manual also makes a strong recommendation for the installation of openable stoves, in which of course smokeless fuels can be used with the greatest advantage. In other ways, too, the Manual's recommendations are of direct value to smoke abatement. Fuller details will be found in a review of the Manual in the Autumn-Winter, 1944, issue of *Smokeless Air*.

The Society has prepared and circularised to Housing Authorities a short memorandum drawing attention

to the smoke prevention aspects of the Housing Manual and adding notes that will, it is hoped, be of practical use.

Other Proposals of the Society.

It has not as yet been possible to make concrete progress in a similar way with the Society's other main proposals for smoke prevention in reconstruction, but both the question of smokeless zones, and that of the control of new fuel-burning installations by regulations analagous to those concerned with building, have continued to be examined and discussed. There is now a wide measure of general agreement on the value and practicability of these proposals, but in both cases the legislative and administrative requirements still await definite shape.

Annual Conference.

Preliminary arrangements were made during the summer for an important joint conference of the Society and the Institute of Fuel intended to be held in London during the autumn. This would have been the Society's own annual conference and would have been held in conjunction with the general business meeting. The uncertainty of conditions in London made it desirable, however, to postpone the date, and arrangements have now been made for it to take place on 23rd February, 1945. Members will receive a detailed programme of what is likely to be a most comprehensive and interesting meeting. The papers and discussions, which will be printed, will make an important addition to smoke pollution literature.

Publications.

Apart from the regular publication of the journal *Smokeless Air*, the only new publication during the year has been the *Proceedings* of the 1943 conference, held in London in November of that year. The short popular booklet *Plan for Clean Air* has been reprinted.

It is believed that *Smokeless Air* is generally appreciated as the Society's most useful means for maintaining interest and disseminating information. Members will have noted a new feature in "Smoke Prevention Abstracts,"

which it is hoped to expand when the paper control is relaxed. The size of the magazine will then be increased and a return will be made to the normal publication of four issues a year. Suggestions for improving the journal and for new subjects for discussion will be most welcome.

Executive Committee.

The Executive Committee met several times during the year, in London and Manchester. It has recently been strengthened by the co-option of observer-members from the professional institutions affiliated to the Society, namely, the Institutions of Electrical, Gas, and Heating and Ventilating, Engineers.

A Tribute from the U.S.A.

The Society has for many years maintained friendly contacts with the Smoke Prevention Association of America, Inc. It has been most gratifying to learn of the following resolution, adopted at its 38th annual convention, held at Detroit in June, 1944 :—

“Whereas the National Smoke Abatement Society of the British Isles has continued its cordial relationship with this Association and its members under most trying conditions, and whereas Smoke Abatement in England has been signally sustained and progress made while defending the freedom of humanity, now, therefore, be it resolved: that the Smoke Prevention Association of America, Inc., extend its greetings and felicitations to our brothers across the sea with all best wishes for further progress in atmospheric purification.”

Finance and Appeal.

The audited statement of accounts published in this report shows that, despite some increase in income, increased activity has led to an excess of expenditure over income of £197. This is due mainly to the return to offices in London, the purchase of furniture and fittings required, the re-engagement of a full-time assistant (there is also a part-time assistant), and to increased printing expenses.

The Society's policy of building up a reserve fund has made it possible for the Committee to meet the deficiency, but it should be noted that so far the increased activity is only a small part of what is needed. Working as we should like to—and ought to—the present reserves would be expended in a very short time.

The only way of developing the Society's work, which during the next few years can be made exceptionally fruitful, is by a larger income, and one that can be depended upon to continue. Single donations and legacies are of course very welcome indeed, but the primary need is to be assured of a continuing income that will allow the Society to budget ahead and plan for steady progress over a number of years. It is towards this end that an appeal is made for that extended support without which it will not be possible to continue the fight for clean and healthy air with ever-increasing pressure and success. The effects of the Society's efforts are becoming manifest in the evidence of official approbation and support detailed in this report. That evidence will be most gratifying to every member of the Society and is an encouragement to further effort. It is also a sign that the loyal support we have received from many members for a number of years—including the difficult period during the early part of the war—has been worth while.

The cause of smoke abatement has always been hampered by lack of means and it would be lamentable if the Society were prevented by insufficient support to carry on the campaign with efficiency at a moment when public opinion has come to realize the possibility of attaining the ideal of clean air for all for which the Society has long striven.

Because of this over-riding need we desire once again to urge our members, and especially our corporate members, to do all they can to help the Society in its urgent struggle to extend its usefulness and influence.

CHARLES GANDY, *Chairman.*

LAWRENCE CHUBB, *Hon. Secretary.*

ARNOLD MARSH, *General Secretary.*

CONSTITUTION OF THE SOCIETY

1. **NAME.**—The Society shall be called the National Smoke Abatement Society.

2. **OBJECTS.**—The Society shall be concerned with the prevention of air pollution generally, and in particular that arising from coal smoke.

The objects of the Society shall be :

- (a) To create an informed public opinion on the evils of air pollution.
- (b) To inquire into and, if thought advisable, assist investigations directed towards the abolition of smoke, whether industrial or domestic.
- (c) To take steps to popularize the use of smokeless methods of heat and power production.
- (d) To promote and support legislation for preventing the pollution of the atmosphere.

3. **MEMBERSHIP.**—The Society shall consist of :—

- (a) Life Members.
- (b) Members.
- (c) Associates.
- (d) Affiliated Members.

Life Members.—A donation of not less than twenty-five guineas paid in one amount by any individual, shall constitute the donor a member for life.

Members.—An Annual Subscription of not less than half a guinea in the case of an individual, or one guinea in the case of a commercial firm, shall constitute the subscriber a member. A commercial firm registered as a member shall be entitled to nominate a representative to exercise the privileges of membership as regards attendance at meetings, voting, etc.

Associates.—An Annual Subscription of not less than five shillings shall constitute the subscriber an Associate.

Affiliated Members.—The payment of not less than one guinea by any Local Authority, Society or Institution, shall constitute the subscribing body an Affiliated Member. The Affiliated Member shall be entitled to appoint two representatives to the Council* of the Society, who shall receive the privileges of full membership of the Society.

4. **PRIVILEGES OF MEMBERSHIP.**—The privileges of membership shall include :—

- (a) Advice and assistance in questions relating to smoke abatement and fuel economy as far as the circumstances of the Society will permit.
- (b) Free admission to lectures arranged by the Society.
- (c) The right to receive free of cost, the general publications of the Society as they appear, including the Journal of the Society. Associates shall not, however, receive the Journal and such other literature as may be decided upon from time to time.

5. **THE COUNCIL.**—The Council of the Society shall consist of the Officers, the members of the Executive Committee, two representatives from each Affiliated Member, together with not more than thirty members to be elected annually at the General Meeting.

The business of the Council shall be to direct the policy of the Society in general and to receive any periodical reports from the Executive or other Committee.

The Council shall meet at such times and places and for such purposes as the Executive Committee shall arrange, and shall also be convened on a requisition signed by not less than three of its members stating the purpose for which such meeting is required.

6. **THE EXECUTIVE COMMITTEE.**—The Executive Committee shall consist of the Officers and not less than twelve members or representatives of Affiliated Members, who shall be elected annually at the General Meeting of the Society. The Executive Committee shall have power to appoint Sub-Committees, and to co-opt additional members. Five shall form a quorum.

The Committee shall meet as required, and the place of meeting shall be at the central offices of the Society, or other place at the discretion of the Committee.

The business of the Committee shall be to manage the affairs of the Society

7. **OFFICERS.**—The Officers of the Society shall be President, Vice-President and Honorary Treasurer, to be elected annually. The Chairman of the Committee and of the Council, shall also be Officers, but shall be elected by their respective Committees.

8. **GENERAL MEETING.**—The General Meeting of the Society shall be held annually at which shall be presented the Annual Report and the Audited Financial Statement, and at which the Officers, the Council and the Executive Committee for the following year shall be elected. Other general meetings shall be held on the requisition of the Council or Executive Committee, or of 20 members of the Society. One month's notice shall be given of all General Meetings.

9. **ALTERATION TO CONSTITUTION.**—No change shall be made in the constitution of the Society, except by a two-thirds majority of the members present and voting at the Annual Meeting or at a Meeting called specially for the purpose. A notice in writing of any resolution to be submitted for this purpose must be sent to all members of the Society at least a fortnight before the Annual or Special General Meeting.

10. **ACCOUNTS.**—Accounts shall be kept of all moneys received and expended by the Society, and once at least every year the accounts of the Society shall be examined and the correctness thereof certified by a qualified auditor.

INFORMATION CONCERNING THE SOCIETY

The National Smoke Abatement Society was formed in 1929 by the amalgamation of the Coal Smoke Abatement Society (1899) and the Smoke Abatement League of Great Britain (1909). It is an organisation dependent entirely upon voluntary support, and its objects and conditions of membership will be found in the Constitution below.

Offices—Central (General Secretary's)
Offices : Chandos House, Buckingham Gate, Westminster, S.W.1.
'Phone : ABBey 1359.
Scottish Branch : City Chambers, Glasgow.
North-Western Branch : 1b, Cooper Street, Manchester.

11. **BRANCHES.**—Branches of the Society shall be constituted, as far as possible, in the towns or districts of the United Kingdom, to deal with local smoke abatement and air pollution problems. Branches shall settle their own constitution and terms of membership, but shall pay an affiliation fee of at least sixpence for every individual member, and of two shillings and sixpence for every firm affiliated to the National Society, except in the case of members who are also members of the National Society. Members of the Branches who are not also members of the National Society shall be entitled to attend the General and other meetings of the Society, but shall not be entitled to vote thereat. The Branch shall, however, appoint two delegates to the Council of the National Society and to the Annual General Meeting, who shall have full voting powers.

12. **JOURNAL AND LITERATURE.**—A copy of each issue of the Journal of the Society, together with all other current general literature shall be sent free to each member and delegate from each Affiliated Member ; to the Town Clerk of each Affiliated Local Authority, and to the Secretary of each Affiliated Society or Institution.

13. **INTERPRETATION OF CONSTITUTION.**—The interpretation of these rules, together with any question on which the rules are silent, shall be decided by the Executive Committee until the next Annual General Meeting.

Lectures, Lantern Slides, Exhibits, etc.—

Normal services are at present largely in abeyance, but inquiry is welcomed and every effort will be made to co-operate in any arrangements that it may be desired to make.

Posters.—The following posters are available : Slogan posters, 30 in. by 20 in. (four kinds), at 4d. each. Large pictorial posters, five in set, for use on ex-E.M.B. frames, at 7/6 per set. New photo-colour poster, 30 in. by 20 in., at 6d. each.

Information and Advice.—The Society is glad, at any time, to be of assistance to any person requiring information on smoke abatement and related matters.

THE COVENANT SUBSCRIPTION SCHEME

Particulars of the scheme that enables you to increase, without extra cost, the benefit of your subscription to the Society. We invite you to consider it.

For the purpose of the scheme the Society is recognised as a "charity" by the Commissioners of Inland Revenue, and it may claim for its own use the amount of the income tax that has been paid on the subscriptions it receives, provided that the subscriber has signed an agreement to subscribe a stated sum annually for a period of at least seven years.

Thus, if a member agrees to subscribe £5 a year, this amount is considered as what remains after a larger gross sum has been taxed, and the Society is able to claim the difference. With income tax at 10/- in the £ the gross amount is £10, and the Society thus receives £5 from the authorities. The benefit to the Society is therefore doubled at no further cost to the subscriber. A lower rate of tax would reduce the amount so recovered, but an increased benefit to the Society remains.

The only obligation into which the subscriber enters in order to assist the Society in this way is to covenant to continue the subscription for a minimum period of seven years, or during his life, which ever period should be shorter.

After the covenant has been signed the subscriber is not required to take any further action other than duly forwarding his annual subscription (or more conveniently paying it by

Banker's Order) and signing an Inland Revenue certificate which will be sent to him each year by the Society, to the effect that the subscription has in fact been paid and has been drawn from his "general fund of taxed income." The certificate will show the gross amount from which tax has been deducted, and the subscriber will be entitled to show such gross amount as a "charge" in his return of income for tax purposes, an advantage some will appreciate.

A specimen form of covenant is given below. Such a document may be prepared on plain paper by the subscriber, and, after being signed and witnessed, sent to the Society. If preferred, the Society will prepare and forward a document on receipt of the particulars required (*i.e.*, name in full, address in full, description or occupation, and the amount to be paid annually to the Society). The required stamping of the document will be attended to by the Society.

It will be noted that the gross amount concerned varies according to the rate of income tax, but that the sum that the subscriber pays direct to the Society does not alter. It is this sum that is stated in the covenant.

The specimen is in the form required by individuals, but corporate bodies will no doubt be able to modify it as may be required.

SPECIMEN OF COVENANT.

I (name).....of.....
(address).....(description or occupation).....
HEREBY COVENANT with the NationalSmoke Abatement Society, of Chandos House, Buckingham Gate, in the City of Westminster, that for a period of seven years from the first day of....., 194....., or during my life which ever period shall be shorter, I will pay annually to the said Society such a sum as will after the deduction of income tax at the rate for the time being in force amount to the sum of.....(amount in words), such sum to be paid from my general fund of taxed income.

IN WITNESS whereof I have hereunto set my hand and seal this..... day of.....194.....
Signed, sealed and delivered by the said }
.....in the presence of }
Signature (witness)..... } (Signature)
Address }
Occupation }

SUBSCRIPTIONS AND DONATIONS

for the Year ended 30th June, 1944

	£	s.	d.		£	s.	d.
Acton Corporation	1	1	0	Bosson, Alfred, M.P.	5	5	0
Acworth, A. W.	0	10	6	Bournemouth Gas Co.	2	2	0
Acworth, Miss E. A.	1	1	0	Bradford Corporation Gas			
Acworth, Miss W. B.	2	2	0	Department	1	1	0
Adams, W. Wakefield	1	1	0	Braidwood, G. L.	0	10	6
Adwick-le-Street U.D.C. ...	1	1	0	Brighouse Corporation	1	1	0
Affleck & Brown Ltd.	2	2	0	Brighouse Corporation Gas			
Alston, J. M.	0	10	6	Committee	2	2	0
Altrincham Gas Co.	1	1	0	Brighton Corporation	1	1	0
Andrew, W. H.	1	0	0	Brighton, Hove & Worthing			
Angus, Col. E. G.	3	3	0	Gas Co.	3	3	0
Anonymous	0	5	0	Bristol Corporation.....	1	1	0
Anonymous (J. C. & Sons)	1	0	0	Bristol Gas Co.	2	2	0
Ascot Gas Water Heaters				Bray, George & Co.	1	1	0
Ltd.	10	10	0	British Commercial Gas			
Ashton Bros. & Co. Ltd. ...	2	2	0	Association	50	0	0
Ashton-under-Lyne Corpor-				British Electrical Develop-			
ation Elec. Dept.	1	1	0	ment Association	100	0	0
Ashwell & Nesbit Ltd.	0	5	0	British Electrical & Allied			
Atkinson, Mrs. M.	1	0	0	Manufacturers' Assoc. ...	5	5	0
				British Gas Light Co. Ltd.	2	2	0
Baker, G. M.	0	10	6	British Insulated Cables Ltd.	1	1	0
Banbury Gas Light & Coke				British Medical Association	1	1	0
Co.	1	1	0	Brookes, T. H.	0	10	6
Barber, Stanley S.	0	10	6	Brown, G. L.	1	1	0
Barker, W. E.	0	10	6	Bullwinkle, C.	0	10	6
Barlow, Sir Thomas	0	10	6	Burnley Corporation	2	2	0
Barrow, Harrison	0	5	0	Burnley Gas Department ...	1	1	0
Bastian & Allen Ltd.	1	1	0	Bury, J. D.	0	10	6
Bath Corporation	1	1	0	Buzzacott, J. D.	0	10	6
Bath Gas Co.	1	1	0				
Batley Corporation	1	1	0	Cablemakers' Association ...	10	10	0
Baxendale & Co. Ltd.	2	2	0	Cadbury Bros.	2	2	0
Baxter, F/O. W. L.	1	1	0	Cadbury, Mrs. G. W.	1	1	0
Bayes, Mrs. M.	1	1	0	Camberwell Corporation ...	1	1	0
Beard, E.	1	1	0	Cambridge Gas Co.	1	1	0
Beard, J. E.	1	1	0	Cannock District Gas Co. ...	1	1	0
Beattie, E. & F. Ltd.	1	1	0	Capper-Johnson, Dr. L. ...	0	10	6
Beit, Sir Alfred, M.P.	1	1	0	Cardiff Corporation	1	1	0
Bennett, M. J.	1	0	0	Cardiff Gas Light & Coke			
Berry, Dr. J. (1943 & 1944)	1	1	0	Co.	1	1	0
Bethnal Green Corporation	1	1	0	Castleford U.D.C.	1	1	0
Bibby, H. P.	2	0	0	Chantler, Philip	0	15	0
Bibby, J. & Sons Ltd.	5	0	0	Charlesworth, Mrs.	0	5	0
Bilston Corporation	1	1	0	Charrington, Gardner, Locket			
Binderman, Mrs. A.	0	5	0	& Co. Ltd.	1	1	0
Bingley U.D.C.	1	1	0	Cheltenham & District Gas			
Birkenhead Corporation ...	2	2	0	Co.	1	1	0
Birmingham Corporation Gas				Chester Corporation	1	1	0
Department	5	5	0	Chester United Gas Co.	2	2	0
Bognor Gas & Electricity Co.	1	1	0	Chingford Corporation	1	1	0
Bonner, J. R.	0	5	0	Chorley Corporation	1	1	0
Bonstow, T. L.	0	10	6	Chubb, Sir Lawrence	0	10	6
Bootle Corporation	2	2	0	Clarke, D. K.	0	10	6

	£	s.	d.		£	s.	d.
Clarke, Dr. R. T. V.	0	10	6	Gas Light & Coke Co.	52	10	0
Clayton, R. H.	2	2	0	Gateshead Corporation	1	1	0
Clegg, E.	0	10	6	General Electric Co. Ltd. ...	5	5	0
Clevedon Gas Co.	1	1	0	Gillison, Dr. J. A.	1	12	0
Clinch, H. G.	0	10	6	Glasgow Gas Department ...	5	5	0
Cohen, Mrs. H.	1	1	0	Gloucester Corporation	1	1	0
✓ Coke Oven Managers' Asso- ciation	1	1	0	Gloucester Gas Light Co....	1	1	0
Cooper, Miss I.	0	10	6	Godalming Gas & Coke Co....	1	1	0
Coote & Warren Ltd.	1	1	0	Goodchild, C. R.	0	10	6
Corrin, H. R.	0	10	6	Goodchild, J. R.	0	5	0
Crosby Corporation	2	2	0	Goodfellow, J. 1943	0	10	6
Croydon Gas Co.	5	5	0	1944	0	10	6
				Graucob Ltd.	1	1	0
Davies, D. E.	0	10	6	Gravesend Corporation	1	1	0
Deakin, Herbert	0	10	6	Great Grimsby Gas Co.	1	1	0
Dearden, John.....	0	10	6	Great Yarmouth Gas Co. ...	2	2	0
Dixon, Thomas	0	10	6	Greenwood, T. A. S.	0	10	0
Doncaster Corporation	1	1	0	Gregory, Dr. Arnold	0	7	6
Dormer, Alwin E.	0	5	0	Gregory, J.	1	0	0
Dudley, Brierley Hill & District Gas Co.	1	1	0	Grimsby Corporation	1	1	0
Duguid, Mr. & Mrs.	1	1	0	Guildford Gas Light & Coke Co.	2	2	0
Durham R.D.C.	1	1	0	Gurney, John	3	3	0
Ealing Corporation	1	1	0	Halifax Corporation	2	2	0
Easington R.D.C.	1	1	0	Hammersmith Corporation ...	1	1	0
Eastbourne Gas Co.	2	2	0	Hancock, Arthur.....	3	3	0
East Cowes Gas Co.	1	1	0	Hardy, G. & Co.	2	2	0
Edmonton Corporation	1	1	0	Harris & Co. Ltd.	1	1	0
Edwards, Miss M.	0	5	0	Harrogate Corporation	2	2	0
Elland Gas Company	1	1	0	Harrogate Gas Co.	1	1	0
Elwell, Mrs. E.	0	10	6	Hartlepool Gas & Water Co. ...	1	1	0
Elsworthy, J. Gordon	1	11	6	Hartley, G. E.	0	5	0
Exeter Gaslight & Coke Co. ...	2	2	0	Hay, Dr. John.....	1	1	0
				Hayes & Harlington U.D.C. ...	1	1	0
Failsworth U.D.C.	1	1	0	Heanor U.D.C.	1	1	0
Farnworth Corporation	1	1	0	Hebden Royd U.D.C. Gas Dept.....	1	1	0
Felling U.D.C.	1	1	0	Herbert, Alfred Ltd.	1	1	0
Finsbury Corporation.....	1	1	0	Herford, Miss A.	0	10	0
Foss, Mrs. Alison	0	10	6	Hereford Corporation	1	1	0
Fox, Frank	0	10	0	Herne Bay Gas Co.....	1	1	0
Fox, Capt. H.	0	10	6	Hessle Gas Co.1943.....	1	1	0
Fulham Corporation 1943... 1944...	1	1	0	1944	1	1	0
Fry, Miss Agnes	0	10	6	Heston & Isleworth Cor- poration	2	2	0
Fry, Miss A. Ruth	0	10	0	Hexham Gas Co.	1	1	0
Fry, Miss Marjory	0	10	0	Heywood Gas Department ...	1	1	0
				Hiller, G. A.....	0	10	6
Gamlen, A. E.	0	10	6	Holborn Corporation	1	1	0
Gandy, Charles	5	0	0	Holbrook, Col. Sir Arthur ...	1	0	0
Gandy, Mr. & Mrs. H.....	1	1	0	Holmes, W. C. & Co.	5	5	0
Gandy, Miss Rosalie L.	0	10	6	Holmes, W. G.	1	0	0
Ganter, Douglas	0	10	6	Holt, W. T.	0	10	6
Gas Chambers & Coke Ovens Ltd.	1	1	0	Horder, Lord	0	10	6
Gas Companies' Protection Association	10	10	0	Houghton-le-Spring U.D.C. ...	1	1	0
Gas Consolidation Ltd.	1	1	0	Howden, James & Co. Ltd. ...	11	11	0
				Huddersfield Corporation ...	1	1	0
				Hull Corporation.....	1	1	0

	£	s.	d.		£	s.	d.
Hutchinson, G. H.	0	10	6	Lister, B. S.	1	0	0
Hyland, Alfred	0	10	0	Lister, H. & Sons	2	2	0
■ Ideal Boilers & Radiators				Littleborough Gas Co.	1	1	0
Ltd.	5	5	0	Liverpool Corporation	26	5	0
Institution of Electrical				Liverpool Gas Company ...	10	10	0
Engineers	10	10	0	London & Counties Coke			
Institution of Gas Engineers	52	10	0	Association	52	10	0
Institution of Heating &				London Electricity Supply			
Ventilating Engineers.....	3	3	0	Association	10	10	0
International Combustion				London Power Co.	1	1	0
Ltd.	1	1	0	Long Eaton Gas Co.	1	1	0
Ipswich Gas Light Co.	1	1	0	Longley, J. A.	1	1	0
Irlam U.D.C.	1	1	0	Lowestoft Gas Co.	2	2	0
Jaffray, F. A.	2	0	0	Ludlow Union Gas Co.	1	0	0
Jast, Mrs. L. Stanley	0	10	6	Luton Corporation	2	2	0
Jewell, Mrs. K. I.	0	10	6	Luton Gas Co.	2	2	0
Johnson, R.	0	10	6	Maidstone Gas Co.	1	1	0
Johnston, Sidney	0	5	0	Malden & Coombe Corpora-			
Kay, Miss Doris	0	5	0	tion	1	1	0
Keeley, Robert	0	10	0	Manchester Corporation.....	26	5	0
Keene, C. E.	0	10	6	Manchester Electricity Dept.	2	2	0
Keighley Corporation	1	1	0	Manchester Gas Department	5	5	0
Kensington Corporation ...	1	1	0	Manger, J. & Son Ltd.....	0	10	6
Kidderminster Corporation	1	1	0	Mansfield Corporation	1	1	0
Kidsgrove Gaslight Co.	1	1	0	Margolis, A. E.	0	10	6
Kirkby-in-Ashfield U.D.C.	1	1	0	Marshall, Mrs. E. J.	0	5	0
Kirkman, Mrs. 1943	0	10	6	Marshall, G. C.	0	5	0
1944	0	10	6	Matthews, Mrs. M.	0	10	6
Kisbee, R. H.	0	10	6	Mather, L. E.	1	1	0
Lancashire & District Coke				Melton Mowbray Gaslight &			
Association	2	2	0	Coke Co.	1	1	0
Lancaster Corporation	2	2	0	Melland, Will	2	0	0
Langford, A. S.	0	10	6	Melland, Mrs. Will	1	1	0
Lapage, Dr. C. P.	0	10	6	Menzies, Dr. J.	0	5	0
Lea Bridge District Gas Co.	3	3	0	Merton & Morden U.D.C. ...	2	2	0
Lee, Miss Dora C.	2	2	0	Middleton Corporation	1	1	0
Lee, Sir Kenneth	1	1	0	Mid-Kent Gaslight & Coke			
Leeds Corporation	10	10	0	Co.	1	1	0
Leeds Corporation Gas				Midlands Joint Advisory			
Department	25	0	0	Council for Smoke Abate-			
Leeds Corp. Electricity				ment	1	1	0
Department	1	1	0	Mill, Dr. L. M. D.	1	0	0
Lees, Miss Majory	1	1	0	Millar, A. Walker	0	5	0
Leicester Cororation	10	10	0	Mirfield U.D.C.	1	1	0
Leicester Gas Department...	3	3	0	Mitchell, Dr. C. Ainsworth	0	10	6
Leominster Gas & Coke Co.				Monmouthshire & South			
Ltd.	1	1	0	Wales Coal Owners Asso-			
Lessing, Dr. R.	1	1	0	ciation, 1943	25	0	0
Lethby, Leonard E.	0	10	6	1944	25	0	0
Lewin, Dr. O. M. S., 1943	0	10	6	Moore, S. J.	0	10	6
1944	0	10	6	Morgan, D. & Sons	1	1	0
Leyton Corporation	1	1	0	McDougall, A.	2	2	0
Lincoln Corporation	2	2	0	McGhie, A. T. S.	0	10	6
Liptak Furnace Arches Ltd.	1	1	0	McGlynn, E. P.	0	10	6
				McHugh, F.	0	5	0
				McLachlan, T.	0	10	6
				MacMillan, Dr. A. M.	0	10	6
				MacWilliam, Dr. H. H.	0	10	6

	£	s.	d.		£	s.	d.
National Gas Council	52	10	0	Seale, Mrs. I. L.	0	10	6
Neill, W. C. H.	0	10	0	Selby, Henry E. W.	0	10	6
Newcastle & Gateshead Gas Co.	1	1	0	Severn Valley Gas Corporation	1	1	0
Newcastle-under-Lyme Corporation	1	1	0	Severs, J. S.	1	0	0
Newcastle-upon-Tyne Corporation	2	2	0	Shaftesbury Countess	0	10	0
Newport (Mon.) Gas Co.....	1	1	0	Shaw, Sir Napier.....	2	2	0
Newton-le-Willows U.D.C.	1	1	0	Shaw, Roy	0	10	6
North - Western Branch N.S.A.S.	2	10	0	Sheffield & District Gas Co.	5	5	0
North Middlesex Gas Co....	2	2	0	Sheffield, Rotherham & Dist. Smoke Abatement Com....	25	0	0
Nottingham Corporation ...	5	5	0	Shipley U.D.C.	1	1	0
Oldham Corporation	5	5	0	Shrewsbury Gas Light Co.	1	1	0
Oldham Gas Department ...	2	2	0	Shoreditch Corporation	1	1	0
Oxford & District Gas Co....	1	1	0	Shore, Lt. Col. B. G.	0	10	6
Oxford Corporation	2	2	0	Silburn, Mrs. E.	0	10	6
Paddington Corporation ...	2	2	0	Simon, Sir Ernest	2	2	0
Parkinson, B. E.	0	7	6	Smethwick Corporation ...	2	2	0
Pearson, Dr. S. V.	0	10	0	Smith, Bailie Brownhill ...	10	0	0
Polding, W. W.	0	10	6	Smith, D. V. H.	0	5	0
Pollitzer, E.	1	1	0	Smith, Herbert	5	0	0
Pontefract Bros.	1	1	0	Solihull Gas Co.	1	1	0
Portsmouth Gas Co.	1	1	0	Southall Corporation	1	1	0
Preston Corporation	1	1	0	Southampton Corporation	1	1	0
Preston Gas Co.	1	1	0	Southampton Gaslight & Coke Co.	1	1	0
Pudsey Corporation	1	1	0	South Eastern Gas Corporation	5	0	0
Radcliffe Corporation.....	1	1	0	South Suburban Gas Co.....	5	5	0
Rathbone, Philip R.	0	10	6	Southwark Corporation ...	1	1	0
Redditch Gas Co.	1	1	0	Spenborough Gas Department	2	2	0
Refuge Assurance Co.	5	5	0	Spenborough U.D.C.	1	1	0
Rheostatic Co. Ltd.	1	1	0	Stalybridge Corporation ...	1	1	0
Rhondda, Lady	0	10	6	Stanley U.D.C.	2	2	0
Richmond Corporation	1	1	0	Stead, G. W.	2	2	0
Ritchie, Gilbert B.	0	10	6	Stepney Corporation	2	2	0
Roberts, John M.	0	10	6	Stockport Gas Committee	2	2	0
Robinson, Mrs. Blanche F.	1	1	0	Stoke-on-Trent Gas Department	1	1	0
Robinson, Mrs. E.	1	1	0	Stourbridge Gas Dept.	1	1	0
Rochdale Corporation	3	3	0	Stretford Corporation.....	1	1	0
Rogers, Phil	2	2	0	Stretford Gas Board	1	1	0
Rothwell U.D.C. 1943	1	1	0	Stroud Gas Light & Coke Co.	2	2	2
1944	1	1	0	Sturtevant Engineering Co. Ltd.	2	2	0
Rowley Regis Corporation	2	2	0	Sunderland Corporation.....	5	5	0
Royton U.D.C.	1	1	0	Swindon United Gas Co. ...	1	1	0
St. Helens Corporation	1	1	0	Swinton & Pendlebury Corporation	2	2	0
Salford Corporation	1	1	0	Technical Advertising Service	1	1	0
Salford Gas Committee	2	2	0	Taylor, H. Frankland	0	10	6
Samuel, Lord and Lady.....	1	1	0	Taylor, Dr. F.	0	5	0
Sanger, Mrs. A. D. 1943 ...	0	5	0	Taylor, P. W.	0	10	6
1944 ...	0	5	0	Thackeray, L. E.	0	5	0
Sanitary Inspectors' Assoc.	1	1	0	Thomas, J. W.	0	10	6
Scarborough Corporation ...	1	1	0				
Scarborough Gas Co.	1	1	0				
Scottish Branch N.S.A.S. ...	6	6	0				
Scott Park, Dr. & Mrs.	0	10	6				

	£	s.	d.		£	s.	d.
Tiranti, A.	0	5	0	Westminster Corporation ...	2	2	0
Tootal, Broadhurst, Lee & Co. Ltd.	3	3	0	Weston-Super-Mare Corpor- ation 1943.....	2	2	0
Tottenham Corporation ...	1	1	0	1944.....	2	2	0
Tottenham & District Gas Co.	5	5	0	Weston-Super-Mare Gas Co. 1943	1	1	0
Travis, W.	26	5	0	1944	1	1	0
Trezise, William E.....	1	1	0	West's Gas Improvements Co. Ltd.	5	5	0
Trier, F. Newton.....	1	1	0	Whiston R.D.C.	1	1	0
Troup, Lady Winifred	0	10	0	Wicksteed, J. H.....	0	10	0
Turner, T. Henry	0	10	6	Widnes Corporation	1	1	0
Urmston U.D.C.	4	4	0	Wigglesworth, Miss E.	1	0	0
Uxbridge U.D.C.	2	2	0	Wilkins, E. H. Dr.	0	10	6
Uxbridge, Maidenhead Wy- combe & District Gas.....	1	1	0	Willesden Corporation	1	1	0
Vereeniging (South Africa) Town Council	1	1	0	Winckworth, D.M.	0	5	0
Dex Voeux Mrs. H. A.	5	0	0	Wolverhampton Corporation Electricity Dept.	1	1	0
Wadham, Miss D.	1	1	0	Wolverhampton Gas Co. ...	3	3	0
Wainwright, David.....	0	5	0	Wood, F. T.	0	10	6
Wakefield Corporation	1	1	0	Woodall Duckham Vertical Retort & Oven Con- struction Co. (1920) Ltd.	2	12	6
Wakefield Gaslight Co.	1	1	0	Wood Green Corporation ...	1	1	0
Wales & Monmouthshire Assn. of Gas Engineers & Managers	1	1	0	Wrexham Corporation	1	1	0
Wall, John M.	1	1	0	Wright, J.	0	10	6
Wallasey Corporation.....	5	5	0	York Corporation	1	1	0
Walsall Corporation	1	1	0	York Gas Company	10	0	0
Walthamstow Corporation	1	1	0	Yorkshire Electric Power Co.	5	5	0
Wandsworth Corporation ...	1	1	0	Yorkshire Gas Coke Associ- ation	50	0	0
Wandsworth & District Gas Co.	5	5	0	Young, J. W.	1	1	0
Ward, Dr. F. A. B.....	1	1	0	Subscriptions & Donations under 5s. 0d.	1	11	0
Warrington Corporation ...	2	2	0				
Watt, Dr. E.	0	5	0				
Wednesbury Corporation ...	0	10	6				
Wellington (Salop) Gas Co.	1	1	0				
Wembley Corporation	1	1	0				
West Ham Corporation 1940	1	1	0				
1941	1	1	0				
1942	1	1	0				
1943	1	1	0				

£1,286	3	6
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INCOME

1943			1944		
£	s.	d.	£	s.	d.
1,092	18	0	1,286	3	6
12	17	6	31	3	5
18	6	0	33	0	1
10	0	0	—		
INCOME			EXPENDITURE		
Subscriptions			Salaries		
Sale of Literature			Rent, Rates, Gas, Water & Heating		
Repayment of Income Tax			Printing and Stationery		
Donation to Staff Pension Scheme—Scottish Branch....			Travelling Expenses.....		
DIVIDENDS FROM INVESTMENTS, ETC.—			General Expenses, Postages and Telephone		
Commercial Union Assurance Co.			Printing "Smokeless Air"		
London, Midland & Scottish Ry. Co.			Less Receipts from Advertisements		
Interest, Manchester & Salford Savings Bank			Printing Pamphlets—"No Clean City" and "Plan		
Sundry Receipts			for Clean Air"		
Deficiency			Staff Pension Scheme		
			Furniture and Fittings		
			Surplus of Income over Expenditure		
£1,153	18	11	£1,570	13	4

Defence Bond Fund.

£	s.	d.		£	s.	d.
400	2	1	Balance as at June 30th, 1943	444	8	1
13	5	6	Interest	13	1	2
31	0	6	Donation	0	10	6
£444	8	1		£457	19	9

£	s.	d.		£	s.	d.
444	8	1	Balance as at June 30th, 1944	457	19	9
£444	8	1		£457	19	9

Balance Sheet. 30th June, 1944.

<i>£</i>	s.	d.		<i>£</i>	s.	d.	<i>£</i>	s.	d.
1,395	2	8	Balance as at June 30th, 1943	1,559	15	11			
164	13	3	Less Deficiency, year to June 30th, 1944	197	14	11			
1,559	15	11	(Surplus)						
—			Add Donation—Pegasus Trust now transferred	1,362	1	0			
			DEFENCE BOND FUND— Balance	40	0	0	1,402	1	0
444	8	1	Pegasus Trust— Donation to Film Competition held in abeyance...				457	19	9
40	0	0					—		
<i>£</i> 2,044	4	0		<i>£</i> 1,860	0	9			
				<i>£</i> 1,860	0	9			

<i>£</i>	s.	d.		<i>£</i>	s.	d.	<i>£</i>	s.	d.
205	11	0	Stock at Cost	205	11	0			
279	5	11	London, Midland & Scottish Railway, £313 4% Deb. Stock at Cost	279	5	11			
423	6	4	Manchester & Salford Savings Bank, Deposit	433	9	11			
691	12	8	Cash at Bank and in Hand (General) DEFENCE BOND FUND— 3% Defence Bonds				455	0	0
440	0	0	Cash in hand				2	19	9
4	8	1							
—			Deposit for Electricity				457	19	9
—			Rent paid in advance				10	0	0
							43	15	0
<i>£</i> 2,044	4	0		<i>£</i> 1,860	0	9			
				<i>£</i> 1,860	0	9			

Audited and found correct.
(Signed) ABBOTT & SON, Chartered Accountants,
40, South King Street, Manchester.
September 1st, 1944.

GENERAL PUBLICATIONS

(Post free except where stated).

Smokeless Air. The Society's quarterly Journal. Regular publications being maintained though the size has temporarily been reduced. The only magazine in the world devoted to the problems of atmospheric pollution. Gratis to members or 2/6 per annum, post free.

The Law of Smoke Nuisances. By W. R. Hornby Steer, M.A., LL.B., Recorder of South Molton, Standing Counsel to the Society. This book, based on an earlier work by Randolph A. Glen and revised and extended in accordance with the Public Health Acts of 1936, is likely to be accepted as a standard work on the subject. In addition to the explanatory chapters, it contains tables of statutes and cases and the relevant sections from the two Acts and the Local Government Act, 1933. 8vo., 65 pages. 1/- paper-backed; 2/6 cloth bound.

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The State of the Atmosphere. A valuable and informative paper by the late Sir Frank Baines, F.R.I.B.A. With a section on the effects of smoke upon building stone. Royal 8vo, pp. 36. Price 6d.

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Smoke Abatement and Fuel Economy. In steam boiler practice. Published by the Manchester and District Regional Smoke Abatement Committee. 12 pages. Price 1d. By post, 2d.

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(See inside front cover for post-war planning publications).

**“There is now a wide-spread demand that
the evil of atmospheric pollution shall be
resolutely attacked. . . . ”**

—Housing Manual, 1944, Ministries of Health and Works

This widespread demand is largely the result of the work of the Society over many years ; work which though limited has been persistent, though slow in producing results has been steadily taking root.

The resolute attack that it demanded must be a combined operation by the Government, Local Authorities, and public opinion. The impulse of the attack will have to come from public opinion, the spearhead of which must be the focus of opinion that is organised as the National Smoke Abatement Society.

Continuing progress depends on the power of the Society and the scale on which it can work. The recently launched Development Appeal is becoming increasingly urgent. It is making good headway but as yet progress is by no means as rapid as it might be. We are grateful to all who have already responded to the Appeal, and shall be equally grateful to others who now generously agree to help in mounting the coming resolute attack upon the evil of smoke.

NATIONAL SMOKE ABATEMENT SOCIETY

Chandos House, Buckingham Gate

Westminster, S.W.1

“THE AIR’S GOOD CAUSE”

C 32

National Smoke Abatement Society

1946



SIXTEENTH ANNUAL REPORT (1945)

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(To April, 1946)

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INFORMATION ABOUT THE SOCIETY.

The forerunners of the Society were the Coal Smoke Abatement Society, established in London in 1899, and the Smoke Abatement League of Great Britain (1909), which was concerned mainly with the Provinces. The two bodies amalgamated in 1929 to form the present Society. In 1945 its growth and increasing influence made necessary a new constitution to which reference should be made for further information about membership, officers, Executive Council and Committees, etc.

Divisions

For electoral purposes and, where it is desired, area organisation, the Society is now composed of the following geographical Divisions: (1) Scotland (2) Northern Ireland, (3) North West, (4) North East, (5) Yorkshire, (6) West Midlands, (7) East Midlands, (8) South West, (9) South East. (See Constitution for the counties in each Division.)

Membership

The Society is wholly dependent on the contributions of its members for the maintenance and growth of its work, and invites the support of all who sympathise with and wish to promote its objects. These, to quote from the Constitution, are "to secure throughout the United Kingdom the maximum of natural light and air free from every form of pollution, and particularly that arising from the combustion of fuel."

There are four classes of membership—for individuals, local authorities, institutions and corporate bodies such as firms and public undertakings. Particulars of membership are given on page 4.

Individual members and the representatives of other members have rights of nomination and voting in elections for Officers and Council. They receive, free of charge, the Society's quarterly journal "Smokeless Air," and other publications. They are entitled to receive assistance and information on problems relating to smoke abatement. In addition to receiving notices of meetings and conferences organised nationally, they are entitled to participate in any activities organised by or in their own Division.

Subscriptions

INDIVIDUAL MEMBERS—Not less than 10s. 6d. a year.
ASSOCIATES—Subscribers of less than 10s. 6d. are Associates, who receive some literature and notices, but not all the privileges of membership.
LOCAL AUTHORITY MEMBERS—Not less than the following amounts, according to populations :

Less than 25,000	...	...	2 guineas
25,000 to 50,000	...	...	3 „
50,000 to 75,000	...	...	4 „
75,000 to 100,000	...	...	5 „
100,000 to 250,000	...	...	10 „
250,000 to 500,000	...	...	15 „
Over 500,000	...	...	25 „

INSTITUTION MEMBERS (which includes Societies, Associations and Groups)—Not less than 10 guineas.

CORPORATE MEMBERS (which includes Companies, Firms, and Departments of Local Authorities)—Not less than 10 guineas.

SPECIAL CASES—The Executive Council may consider applications for membership on special terms as to subscriptions and otherwise. This rule is intended to apply in particular to local and other small voluntary associations wishing to become Institution Members.

DONATIONS—The Society will be pleased to receive single or annual donations for any amounts from non-members.

PUBLICATIONS—Annual subscriptions may be made for "Smokeless Air" and for other publications as issued.

PAYMENT OF SUBSCRIPTIONS—The first subscription should be forwarded with application for membership. This may be sent at any time, and the subscription remains in force until the first day of the corresponding month of the following year. It is mutually advantageous if subscriptions are made by Banker's Order.

Representatives

Local Authority, Institution and Corporate Members are entitled to appoint Representatives to exercise on their behalf the rights of members as regards nomination for office, voting, and receipt of publications, etc. Institution and Corporate Members may appoint two representatives each, and Local Authority Members a number according to population, as follows :

Less than 100,000	...	...	...	...	2
100,000 to 250,000	...	...	...	...	3
250,000 to 500,000	...	...	...	...	4
500,000 and over	...	...	...	...	5

The names and address of Representatives should be forwarded on making application for membership, so that they may be entered in the Voting Registers.

SERVICES TO MEMBERS.

Information and Advice

Members may obtain from the Society, at the discretion of the Executive Council, and free of charge, advice, assistance and information on questions relating to atmospheric pollution and its prevention.

Library

The Society possesses an extensive collection of books, reports, and pamphlets, British and foreign (largely U.S.A.) on smoke abatement and related subjects. Copies may be borrowed by members or consulted at Chandos House.

Lectures

The Society will be pleased to help members and others to arrange lectures and talks of all kinds in any part of the country on smoke prevention and related subjects. It is hoped very shortly to draw up a new Panel of Lecturers, similar to that in use before the war. This will indicate the area, subjects, types of meeting, etc., with which each lecturer is concerned. Members qualified and prepared to have their names included in the Panel are invited to write to the General Secretary.

Lantern Slides and Films

The lantern slide collection is to be revised and extended and slides will be available on loan at a charge of 1d. each per lecture, plus postages. Slides for inclusion in this collection, especially of modern equipment, will be received with thanks. **Films**—The Society does not at present possess films of its own, but will be glad to suggest suitable films that may be available from other sources.

Exhibits

The pre-war exhibit service is being resumed and improved. Inquiries about the loan of exhibits, or the Society's participation in exhibitions should give the fullest details possible of what is required. In view of transport and packing difficulties material can be loaned more readily if it can be collected from and returned to Chandos House by car or van.

Posters

The following posters are available : (1) Set of pictorial and letterpress posters designed for use on ex-E.M.B. frames, but can be used singly. Price 2/6 per set. (2) New prize-winning photo-colour poster, 30 in. x 20 in. Price 6d. each. (3) New pictorial chart primarily for school use, "These are the Things that Smoke Does." 30 in. x 20 in. Price 6d. (Other charts to follow in due course.) Reduced prices for quantities. Posters may be supplied free of charge in appropriate cases.

Literature

Inquiries are invited on the supply of publications, give-away leaflets, etc., for special purposes.

Photographs

A collection of photographs of smoke abatement subjects, suitable for reproduction and exhibition purposes, is being built up, and prints will be forwarded on request. Subjects required should be specified. Reproduction fees, where chargeable, at standard rates. New photographs of high pictorial quality are desired, by gift, copyright purchase, or other arrangement.

THE COVENANT SUBSCRIPTION SCHEME.

Particulars of the scheme that enables you to increase, without extra cost, the benefit of your subscription to the Society. We invite you to consider it.

For the purpose of the scheme the Society is recognised as a "charity" by the Commissioners of Inland Revenue, and it may claim for its own use the amount of the income tax that has been paid on the subscriptions it receives, provided that the subscriber has signed an agreement to subscribe a stated sum annually for a period of at least seven years.

Thus, if a member agrees to subscribe £5 a year, this amount is considered as what remains after a larger gross sum has been taxed, and the Society is able to claim the difference. With income tax at 9/- in the £ the gross amount is £9 1s. 10d., and the Society thus receives £4 1s. 10d. from the authorities. The benefit to the Society is thus nearly doubled at no further cost to the subscriber. A lower rate of tax would reduce the amount so recovered, but an increased benefit to the Society remains.

The only obligation into which the subscriber enters in order to assist the Society in this way is to covenant to continue the subscription for a minimum period of seven years, or during his life, which ever period should be shorter.

After the covenant has been signed the subscriber is not required to take any further action other than duly forwarding his annual subscription (or more conveniently paying it by

Banker's Order) and signing an Inland Revenue certificate which will be sent to him each year by the Society, to the effect that the subscription has in fact been paid and has been drawn from his "general fund of taxed income." The certificate will show the gross amount from which tax has been deducted, and the subscriber will be entitled to show such gross amount as a "charge" in his return of income for tax purposes, an advantage some will appreciate.

A specimen form of covenant is given below. Such a document may be prepared on plain paper by the subscriber, and, after being signed and witnessed, sent to the Society. If preferred, the Society will prepare and forward a document on receipt of the particulars required (*i.e.*, name in full, address in full, description or occupation, and the amount to be paid annually to the Society). The required stamping of the document will be attended to by the Society.

It will be noted that the gross amount concerned varies according to the rate of income tax, but that the sum that the subscriber pays direct to the Society does not alter. It is this sum that is stated in the covenant.

The specimen is in the form required by individuals, but corporate bodies will no doubt be able to modify it as may be required.

SPECIMEN OF COVENANT.

I (name).....of.....
(address).....(description or occupation).....
HEREBY COVENANT with the National Smoke Abatement Society, of Chandos House, Buckingham Gate, in the City of Westminster, that for a period of seven years from the first day of....., 194....., or during my life which ever period shall be shorter, I will pay annually to the said Society such a sum as will after the deduction of income tax at the rate for the time being in force amount to the sum of.....(amount in words), such sum to be paid from my general fund of taxed income.

IN WITNESS whereof I have hereunto set my hand and seal this..... day of.....194.....

Signed, sealed and delivered by the said
.....in the presence of
Signature (witness)..... } (Signature)
Address
Occupation

SIXTEENTH ANNUAL REPORT

for the Year ended 31st December, 1945.

General Review.

The year 1945 brought us peace and the first appalling demonstration of the titanic new force of nuclear energy. This energy, in its development for peaceful purposes, may in the not distant future play a decisive part in ending what has been well termed the age of fossil power. It is the primitive use of one of these fossils, coal, that is responsible for the existence of this Society, for which every step towards new ways of releasing and using energy is of direct importance. The prospects of nuclear energy playing a decisive part in ridding this country of its polluted atmosphere are, however, still obscure, and our policy must be to continue our work of helping to bring to an end the cruder ways of using coal that lead to the pollution of the air. In its progress towards this end 1945 has been particularly important to the Society. Not only does the end of the war make possible the full resumption of development that was halted in 1939, but it reveals the Society, and the movement in general, in a far stronger position than it was then, and with possibilities of success substantially more promising than could have been conceived before the war.

During the year the most important internal event has been the reconstitution of the Society; externally the most significant step has been the action of two of the most important local authorities in the country agreeing to seek legislation on the new lines proposed and elaborated by the Society. There has been particularly valuable collaboration with the Institute of Fuel in the form of a major conference in London and in meetings in the Provinces. The problem has been surveyed outside the Society's sphere, and mention may be made of an important Chadwick lecture on "Coal in Relation to Atmospheric Pollution" read by Dr. A. Parker, Director of the Fuel Re-

search Station at the London School of Hygiene on 13th March. The special intensive investigation into the behaviour of pollution in the atmosphere that was carried out before the war at Leicester has now been published by the Department of Scientific and Industrial Research under the title of *Atmospheric Pollution in Leicester: A Scientific Survey* H.M.S.O. 3/-). It contains much new and useful information on the dispersal and distribution of pollution, and, although rather technical, is an important aid towards a wider understanding of the effects of smoke emission.

Mention should be made of the strong advocacy of planning for freedom from smoke contained in a chapter on "Smoke Abolition" in the comprehensive *City of Manchester Plan*, by R. Nicholas, City Surveyor. This is an example of the valuable support now being given more and more by those in responsible positions, especially among local authorities. Sir George Elliston's work for smoke abatement in the City of London Corporation, in his capacity of Chairman of the Public Health Committee, which is referred to later, is a further example of such valued support.

The general activities of the Society are recorded below. The report does not include many matters which, though perhaps of minor importance in themselves, create, for those who are directly dealing with them and able to see them as part of a wider pattern, a feeling of confidence in the way attention to the problem of smoke is steadily increasing. A great deal has yet to be done, but the framework for very substantial gains is coming together in a most satisfactory way. Only in the field of new housing are there grounds for real dissatisfaction, and even here it is believed that once transitional difficulties have been overcome there will be good progress on the lines we

have been advocating with some persistence.

Smoke Abatement in Parliament.

A discussion on smoke abatement took place in the House of Commons, before the change of Government, in the debate on the Ministry of Fuel and Power Bill, when an amendment was moved by Major S. F. Markham to include in the functions of the Minister "the abatement of smoke and other measures arising from the consumption of fuel or utilisation of power." A number of members took part in this part of the debate, including Mr. E. Shinwell, at the time a private member, and now Minister of Fuel and Power himself. Some of his remarks may in slightly condensed form be recorded as an indication of his convictions on a subject for which he now has the prime responsibility:

"I venture the opinion that if we had conserved our coal resources effectively before the war, and used coal efficiently and scientifically, we might have had no coal problem at all during the war, and many of our Debates would have been unnecessary, and indeed the question of setting up a Ministry might not have arisen.

"For many years it has been my view, that if I had the power myself—I mean real power, the sort of dictatorial power one would like to assume on certain occasions in order to get something done—I would have prevented the burning of raw coal in this country. Some people like it. I think it is an abomination and in the long run, from the stand point of health and of fuel conservation, it would be one of the finest reforms in which this country had ever engaged if we could prevent the burning of coal in its raw state."

A number of questions were asked in the House of Commons during the year, principally on the production of improved domestic fuel-burning appliances. The thanks of the Society are particularly due to Mr. E. H. Keeling, a Vice-President, for a series of questions he put to Ministers on 7th, 13th and 14th June. Of particular

value was the following question and the answer given to it:

MR. KEELING asked the Minister of Fuel and Power whether he will give an estimate of the annual consumption of coal and coke in the projected 4,000,000 new houses if the new types of more efficient appliances are installed; and alternatively, if grates and ranges of pre-war design are installed.

SIR A. HUDSON: As my hon. Friend will appreciate it is not possible to give accurate estimates of the annual consumption of coal and coke in the houses to which he refers. But I am advised that, if the householders were content with the pre-war standard of heating, the saving in consumption by the use of the new and more efficient appliances would be of the order of 4,000,000 tons per annum.

Smokeless Zones.

The Society's proposal for the progressive abolition of smoke by the setting up of smokeless zones has received further examination in many quarters, and this has been stimulated by the publication of a special pamphlet, *Smokeless Zones*. The proposals are now entering the field of practical politics and both the City of London and the City of Manchester are seeking statutory powers to enable smokeless zones to be established in their areas. This means that during 1946 the principle will, for the first time, be considered by Parliament.

Smokeless zones have received some criticism from those concerned with the measurement of atmospheric pollution as affording only a small improvement in conditions in the zones of relatively small areas so far concerned. If the intention was for the zones to remain permanently of this initial size there would be force in this contention, but, of course, they must be regarded as the *starting points* of a process of progressive extension.

"Prior Approval."

The phrase "prior approval" is perhaps the best short term for the Society's further proposals that all new fuel-burning plant should require

the prior approval of a competent authority before it can be installed. This principle has been considered in some detail by a sub-committee of the Executive Committee and it is anticipated that suggestions for new byelaws under the Public Health Acts, which will include such control, will be brought forward for discussion in the near future. The City of London, has, however, already agreed to include in its proposed new legislation powers for this purpose, namely, "to require that in new buildings, plans and specifications for heating arrangements, whether for the generation of power, the warming of rooms, the heating of water, or the cooking of food, should be submitted to the Corporation for approval."

General Meetings.

An Annual General Meeting was held at the Caxton Hall, London on 22nd February, at which Mr. Will Melland was re-elected President and Sir Lawrence Chubb re-elected Hon. Treasurer. The most important action taken was a resolution requiring the Executive Committee to draft a new constitution. The following resolutions, addressed respectively to the Government and to local authorities, were also passed:

1. "That this meeting of the National Smoke Abatement Society welcomes as a necessary first step towards the abolition of domestic smoke the relevant Government statements and recommendations contained in the *Housing Manual*, 1944 and urges that:

(a) The importance of adopting these recommendations is clearly brought before all housing authorities.

(b) Ways and means are considered for the adoption of the recommendations in all privately built houses; and

(c) An early examination be made of the methods and requirements for the progressive elimination of all domestic smoke so that all building, planning, and the development of the production and use of smokeless fuels and suitable appli-

ances may be consistent with and help to promote such methods and requirements.

2. "That this meeting of the National Smoke Abatement Society urges all Local Authorities who acquire land for the purposes of re-development and reconstruction to ensure that, when the land is re-developed for industrial purposes, the leases to the occupiers will contain such provisions that all installations of solid fuel-burning appliances will be efficient for their purpose and as smokeless as possible, and for that purpose shall submit plans of such installations to the local Authority for their approval before use."

A Special General Meeting was held on 19th October at which a draft for a new constitution was submitted on behalf of the Executive Council. With a few amendments the draft was approved and a resolution was passed by which the former constitution was superseded. A further resolution empowered the Officers and former Executive Committee to continue to act until the first elections and an ordinary annual meeting, which it was agreed should be held as early as possible in 1946. It was later agreed to hold this meeting at the Royal Horticultural Hall, London, in conjunction with an important exhibition of appliances for the use of solid smokeless fuels.

Conferences.

The most important conference of the year was held jointly with the Institute of Fuel at the Institution of Electrical Engineers, London, on 23rd February. Morning and afternoon sessions, with eight papers, were held, which together covered a very wide field and brought together much up-to-date information on the different aspects of the problem. The authors were: Dr. G. M. B. Dobson, Major S. F. Markham, S. N. Duguid, John Bruce, Dr. R. J. Sarjant, A. Blackie, M. G. Bennett and a joint paper by E. Rowden, W. Noble and A. T. Green. The conference was opened by Tom Smith, M.P., Parliamentary Secretary to the Minister of Fuel and Power, who read an address

on behalf of the Minister. Over 230 members and delegates of the Society alone were present. A full report of the proceedings, with discussion has been printed and is available.

On 19th October, preceding the special general meeting, an emergency conference to discuss the installation of improved fuel-burning appliances in new houses was held at the Caxton Hall, attended largely by delegates of local authorities and technical representatives. It was opened by Alderman C. W. Key, M.P., Parliamentary Secretary to the Minister of Health, whose address provoked a critical discussion of the Government's policy on the production and installation of the more efficient appliances urged by the Society and recommended in the *Housing Manual*. A resolution was adopted asking the Executive Committee to convey to the Minister the opinions of the meeting and asking him to receive a small deputation. The report and request were duly submitted, but the Minister was unable to meet the proposed deputation. A full report of the meeting and subsequent action has been printed.

On 4th May the Scottish Branch—now the Scottish Division—of the Society held its annual conference in Glasgow, at which papers were read by T. M. Ashford, R. S. Dunbar and Arnold Marsh. A report of this meeting is available from the offices of the Division, at City Chambers, Glasgow.

On 8th November a meeting on "Smoke Prevention in Post-War Planning", under the joint auspices of the Society of Medical Officers of Health (Southern Branch), the Sanitary Inspectors' Association (Southern Centre), the Southampton Civic Society, and the National Smoke Abatement Society, was held in Southampton. Papers were read by Major S. F. Markham, Dr. Metcalfe Brown, and L. A. Stroud. This was the first meeting of its kind in the Southern counties, and although the attendance was little more than fifty it was most successful. It was organised mainly by the Society and the experience gained should be of value in further area conferences it

is hoped to organise from time to time in different parts of the country. This meeting is reported in the Autumn-Winter 1945 issue of *SMOKELESS AIR* (No. 59).

A joint meeting of the Society and the North-Western Section of the Institute of Fuel was held in Manchester on 14th November, and was very well attended, mainly by local authority representatives. The subject was "Domestic Fuel Efficiency and Smoke Prevention," and the speakers were Dr. G. E. Foxwell, Charles Gandy, and Arnold Marsh. The proceedings of this meeting, too, have been printed. Dr. Foxwell was also the speaker at a joint meeting of the Scottish Division and the Scottish Section of the Institute of Fuel in Glasgow on 30th November, when he spoke on "Fuel Utilisation."

Your Secretary also attended a meeting of the South Wales Section of the Institute of Fuel in Swansea on 9th November, and opened the discussion on a series of three short papers on domestic heating. Addresses to Rotary Clubs have been given by your Chairman and Secretary.

Housing.

In addition to the October conference and the questions in Parliament referred to above, the Executive Committee has had the position in respect to the equipment of new houses continually under review. At a meeting on 6th July the following resolution was adopted by the Committee:

"THAT the Executive Committee of the National Smoke Abatement Society expresses its grave anxiety at a situation which, judging by replies to questions in the House of Commons by the Minister of Health (7th June) and the Minister of Fuel and Power (14th June) will, in spite of recent considerable advances in design, result in a great number of new houses being fitted with solid fuel-burning appliances of obsolete type and inferior efficiency. This must mean: that there will be a further wasteful consumption of solid fuel

during a period of continuing scarcity; that the occupiers of new houses will have permanently higher fuel costs; and that the smoke evil will be extended and intensified.

"The Committee has noted the Parliamentary reply on behalf of the Minister of Fuel and Power (13th June) to the effect that the fuel so wasted will be in the order of one ton per house per annum. This, at present fuel prices, is equivalent to raising the real rent of each house by about 1s. 6d. per week.

"The Committee fully recognises the difficulties of the present general situation in respect of production, but it cannot avoid the opinion that this particular problem, which so closely affects not only the national economy, public health and amenity, but the cost of living, the comfort and the amount of domestic work to be done in every house, has been grossly neglected, both in planning and execution.

"It therefore most strongly urges immediate and determined joint action on the part of the Ministries of Health, Works, and Fuel and Power to make possible the fitting in all new houses, whether permanent or temporary, municipally or privately built, of new appliances of higher efficiency as recommended in the Government's Housing Manual, 1944."

This was submitted to the Government departments concerned and circularized, for information, to all Housing Authorities throughout the Country.

The Fuel and Power Advisory Council

During the year the Society submitted to the Fuel and Power Advisory Council of which Sir Ernest Simon is Chairman, a memorandum on the prevention of domestic smoke. Later, your Chairman and General Secretary met members of the Council for the purpose of discussing certain aspects of the memorandum.

New Towns Committee.

Towards the end of the year the New Towns Committee of the Ministry of Town and Country Planning invited the Society to submit a memorandum on lines that had been suggested—namely, to show that in the planning of the proposed new towns complete prevention of smoke should be secured, and the new towns regarded in their entirety as smokeless zones.

Obituary.

It is with regret that we have to record the death of one of our most distinguished Vice-Presidents, Sir Napier Shaw, F.R.S. Sir Napier, who was born in 1854, was a great meteorologist and had a close and lasting interest in the problem of smoke. He was joint author with Dr. J. S. Owens of *The Smoke Problem of Great Cities*, and as Director of the Meteorological Office was closely associated with the development, from its earliest days, of the Investigation of Atmospheric Pollution. For many years he was Chairman of the Committee of this body, and he was also President of the Smoke Abatement League of Great Britain until it became a part of the present Society. Sir Napier had many honours and distinctions in the academic field and in the realm of international science.

Publications.

Some conference reports published during the year have been mentioned above, namely the Reports on the London Conference, February 1945 and the Manchester Conference November 1945 (both jointly with the Institute of Fuel), and the Report on "Improved Fuel Burning Appliances for New Houses" Conference, London, October 1945. Mention has also been made of *Smokeless Zones*, in which the proposals are fully discussed. *Smoke Control*, issued at the end of the year, is a short booklet of suggestions to local authorities on the steps they can take, with their existing powers, to prevent or reduce the likelihood of smoke emission from new industrial premises. *Smoke Prevention and Science*

Teaching is designed to show how the smoke problem can be introduced during the teaching of normal school subjects and how interesting and practical experiments can be undertaken in school. Allied to this is a first pictorial chart, for use principally in schools, which is at present being prepared.

In addition, *SMOKELESS AIR* has continued to be published and, as far as is known, to be appreciated by its readers. The number of issues has still to be limited to three a year owing to the control of paper for periodicals, although a recent relaxation makes it possible to have a larger (and badly needed) number of copies. The replies to a questionnaire sent to readers gave some helpful information. The journal appears to maintain a fair balance between technical and non-technical information. Photographs are appreciated, and there is a general desire that the present pocket size should be retained even when paper supplies again become more abundant.

Members may have noted the new cover of *SMOKELESS AIR*, and other pictorial or decorative treatment in recent publications. In design work of this kind the Society now has an arrangement for consultative and working co-operation with the Leicester College of Art. The Society has during the last few years gained some commendation for the quality of its printed matter and it will endeavour to develop and make good use of this publicity asset.

The New Society.

It is perhaps not an exaggeration to describe the Society as a new organisation as a result of the considerable changes made under its new constitution. Members will have received a copy of this, so that there is no need to describe its terms. The new governing body, the Executive Council, the Divisional structure, the new methods of election, and the new subscription scales should together make the Society a much stronger body with greater capacity for development than was possible under the original constitution. At present the changes are

involving a large amount of additional office work, but when once the initial tasks are completed it is expected that the administration of the Society will run smoothly and effectively.

The extent to which the Society, considered as an organisation, is to develop depends, of course, on whether its income continues to follow the upwards trend now in progress. The special appeal made towards the end of 1944 was moderately successful, as will be seen by comparing the income for the last financial year with that for the previous year, in the statement of accounts that follows this report. The increase shown would, however, have been only partly consolidated if it had not been for the agreement to a new constitution that includes higher rates of subscription for members other than individuals. As subscriptions become due for different members in different months throughout the year it is not yet possible to say what the complete response to the changes will be, but up to the end of the year the indications were that all but a few of the Local Authority Members, and a fair proportion of Corporate and Institution Members would agree to make the increased contributions requested. In a few cases former subscriptions are being continued as annual donations without the privileges of membership.

The increased income comes not a moment too soon. Without it much of the Society's most urgent work would have to be neglected, and many obvious and necessary developments could not even be considered. As it is the income must continue to increase if our effectiveness is to continue to extend. Expenditure, especially in printing and similar publicity work, is growing, as this report will indicate. It has also been necessary to enlarge the staff, although even now this only numbers four, and a further overhead expense will have to be borne shortly as a result of a substantial increase in office rent. Some deferred increments to staff salaries has been made

during the year, but the Executive Committee considers that these are still lower than for positions of similar responsibility in commercial and public services.

In view of these factors it is essential that the drive for additional support and new membership should continue, and in this task the co-operation of all present members and friends is requested.

Other Activities.

Many other useful activities have been carried out during the year, including a special circularisation of women's organisations on the problem of the heating of the new houses (including a printed circular to 1500 branches of the Women's Co-operative Guild); the circularisation of *Smokeless Zones* to the members of the Councils of a number of the principal local authorities: and the sending of the further memorandum referred to above, *Smoke Prevention in new Housing* to all Housing Authorities. In addition to

such planned "operations" the routine work of correspondence, contact, supplying information and answering queries, etc., had considerably increased with the gradual return of peacetime conditions and greater public concern with post-war problems. A rough measure of this increase of general activity is shown by the fact that postages during 1945 were three times as great as in 1944.

The Officers, in presenting this Report, do so with the feeling that it is easily the fullest and most satisfactory to be written since the formation of the Society, and they hope that their impression will be shared by the members whose support, often over many years, is the foundation of the progress now being made.

CHARLES GANDY, *Chairman.*

LAWRENCE CHUBB, *Hon. Treasurer.*

ARNOLD MARSH, *General Secretary.*

January 1946.

Income and Expenditure Account year ended 30th June, 1945.

1944		1945		1944		1945	
£	s. d.	£	s. d.	£	s. d.	£	s. d.
INCOME				EXPENDITURE			
1,286	3 6	2,150	10 0	748	10 2	998	5 10
31	3 5	30	16 8	147	3 5	199	19 0
33	0 1	143	17 0	221	0 3	251	17 5
—	—	—	—	35	14 0	37	17 8
4	6 6	4	10 10	202	19 5	170	1 5
6	5 2	—	—	87	14 2	71	7 5
10	3 7	(1½ years)	9 7 9	50	0 0	50	0 0
1	16 2	Interest, Manchester & Salford Savings Bank.....	11 9 10	77	11 11	—	—
197	14 11	Sundry Receipts	70 10 6	—	—	641	13 10
£1,570	13 4	Excess of Expenditure over Income	—	£1,570	13 4	£2,421	2 7

Defence Bond Fund.

£	s. d.	£	s. d.	£	s. d.
444	8 1	457	19 9	457	19 9
13	1 2	13	12 10	—	—
0	10 6	—	—	—	—
£457	19 9	£471	12 7	£471	12 7
Balance June 30th, 1944		Balance as at 30th June, 1945		471 12 7	
Interest		—		—	
Donations		—		—	

Balance Sheet, 30th June, 1945.

£	s. d.	£	s. d.	£	s. d.	£	s. d.
1,556	15 11	1,402	1 0	205	11 0	205	11 0
197	14 11	641	13 10	279	5 11	279	5 11
1,362	1 0	2,043	14 10	433	9 11	279	5 11
40	0 0	—	—	—	—	444	19 9
1,402	1 0	—	—	429	19 2	929	16 8
457	19 9	—	—	455	0 0	1,103	18 2
—	—	—	—	2	19 9	470	0 0
—	—	—	—	10	0 0	1	12 7
—	—	—	—	43	15 0	471	12 7
—	—	—	—	—	—	10	0 0
£1,860	0 9	£2,515	7 5	—	—	—	—
SURPLUS—		INVESTMENTS (GENERAL)—		—		—	
Balance as at 30th June, 1944		Commercial Union Assurance Co., £25		Cash at Bank and in Hand (General)		470 0 0	
Add Surplus of Income over Expenditure		Stock at Cost		DEFENCE BOND FUND—		1 12 7	
Less Deficiency		London Midland & Scottish Railway, £313 4% Deb. Stock at Cost		3% Defence Bonds		—	
Add Donation—Pegasus Trust		Manchester & Salford Savings Bank Deposit		Cash in Hand		—	
—		—		Electricity Deposit		—	
DEFENCE BOND FUND—		—		Rent paid in advance		—	
Balance		—		—		—	
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SUBSCRIPTIONS AND DONATIONS

for the Year ended 30th June, 1945

* *Covenant Subscriber*

Division 1—Scotland †

	£	s.	d.
Falconer, Mrs. J.	0	10	6
Glasgow Corporation Gas Department	5	5	0
Howden, James & Co. Ltd.	10	10	0
Jewell, Mrs. K. I.	0	10	6
Mill, Dr. L. M. D.	1	0	0
Millar, A. Walker	0	5	0
National Smoke Abatement Society (Scottish Branch)	6	6	0
Ritchie, Gilbert B.	0	10	6
Scott Park, Dr. & Mrs. S. D.	0	10	6
Stead, G. W.*	11	11	6
Watt, Dr. Ernest	0	10	0

Division 2—Northern Ireland

Young, Miss A. C.	1	10	0
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Division 3—North-West

Accrington Corporation.....	2	2	0
Accrington High School for Girls' Scientific Society...	0	10	6
Affleck & Brown Ltd.	2	2	0
Altrincham Gas Co.	2	2	0
Andrew, W. H.	1	0	0
Ashton Bros. & Co. Ltd. ...	2	2	0
Ashton Gas Co.	3	3	0
Ashton-under-Lyne Electri- city Dept.	2	2	0
Baxendale & Co. Ltd.	2	2	0
Bayes, Mrs. M.	2	1	0
Beard, E.	1	1	0
Beattie, E. & F. Ltd.	1	1	0
Behrens, A.	0	10	0
Bibby, H. P.	2	0	0
Bibby, J. & Sons Ltd.	5	0	0
Bolton Corporation	3	3	0
Bootle Corporation.	2	2	0
British Insulated Cables Ltd. (Balance 1944)	4	4	0
1945	5	5	0
Burnley Corporation	2	2	0
Burnley Corporation Gas Department	1	1	0
Byle, E. C.	0	10	6
J. C. & Son (Anonymous) ..	1	0	0
Chadderton U.D.C.	2	2	0
Chester Corporation	3	3	0
Chester United Gas Co.	2	2	0
Chorley Corporation	1	1	0
Chorlton, Miss M. D.	0	10	6
Clayton, R. H.*	15	0	0
Clitheroe Corporation.	1	1	0

	£	s.	d.
Cohen, Mrs. Hilda	1	1	0
Cooper, Miss I.	3	1	0
Cornbrook Brewery Co. Ltd.	2	0	0
Coulthard, Dr. A.	0	17	6
Coulthard, Miss D.	1	0	0
Davies, D. E.	0	10	6
Deakin, Herbert	0	10	6
Denton U.D.C. (1944)	2	2	0
(1945)	2	2	0
Duguid, Mr. & Mrs. S. N.	1	1	0
Edwards, Miss M.	0	7	6
Failsworth, U.D.C.	1	1	0
Farnworth Corporation	1	1	0
Gamlen, R. E.	1	1	0
Gandy, Charles*	5	0	0
Ganter, Douglas	0	10	6
Gregory, Dr. Arnold	0	10	0
Gregory, Mrs. J.	1	2	0
Hancock, Arthur	3	0	0
Hardy, G. & Co.	2	2	0
Hartley, George	0	5	0
Hay, Dr. John.	1	1	0
Herford, Miss A. C.	0	10	0
Heywood Corporation Gas Dept.	1	1	0
Holt, W. T.	0	10	6
Hutchison, Col. R. T.	0	10	0
Hyde Corporation	1	1	0
Irlam U.D.C.	1	1	0
Johnston, Sidney	0	5	0
Kay, Miss Doris	0	5	0
Keddie, Dr. J. T. Chalmers	0	10	0
Keeley, Robert	0	10	0
Lancashire & District Coke Association	2	2	0
Lancaster Corporation	2	2	0
Langford, A. S.	0	10	6
Lapage, Dr. C. P.	0	10	6
Lea Recorder Co.	2	2	0
Lee, Sir Kenneth.	1	1	0
Lees, Miss Marjory.	1	1	0
Lewis, D. D. J.	1	0	0
Littleborough Gas Co.	1	1	0
Liverpool Corporation	26	5	0
Liverpool Gas Co.	10	10	0
Macclesfield Corporation ...	2	2	0
Manchester Corporation ...	26	5	0
Manchester Gas Dept.	5	5	0
Manchester Electricity Dept.	5	5	0
Marple U.D.C.	2	2	0
Marple Gas Dept.	1	1	0
Mather, Capt. L. E.	1	1	0
Melland, Will	2	0	0
Melland, Mrs. Will	1	1	0
Metropolitan-Vickers Elec- trical Co. Ltd.	6	6	0

† Does not include subscriptions paid direct to the Scottish Branch

	£	s.	d.		£	s.	d.
Middlewich Gas Light & Coke Co. Ltd.	2	2	0	Baker, G. M.	0	10	0
Middleton Corporation	1	1	0	Blaydon Corporation	2	2	0
Moore, S. H.	0	10	6	Caller, Dr. S.	0	10	6
Morrison, Dr. J.	1	1	0	Chester-le-Street R.D.C. ...	3	3	0
Mossley & Saddleworth Gas Co.	3	3	0	Darlington Corporation	2	2	0
MacWilliam, Dr. H. H.	1	0	6	Durham R.D.C.	1	1	0
National Smoke Abatement Society, North Western Branch	2	10	0	Easington R.D.C.	1	1	0
Nantwich Gas Co. Ltd.	2	2	0	Felling on Tyne U.D.C. ...	1	11	6
Nelson Corporation.....	2	2	0	Gandy, Mr. & Mrs. H.* ...	1	10	0
Newton-le-Willows U.D.C.	1	1	0	Gateshead on Tyne Corporation	1	1	0
Oldham Corporation (1944) (1945)	10	10	0	Hartlepool Gas & Water Co.	1	1	0
Oldham Corporation Gas Dept.....	2	2	0	Houghton le Spring U.D.C.	1	1	0
Polding, Wm. W.*.....	0	10	6	Haycroft, Mrs. E.	0	10	6
Pontefract Bros.....	2	2	0	Hexham Gas Co.....	3	3	0
Preston Corporation	1	1	0	Jones, Griff	1	0	0
Preston Gas Co.	1	1	0	Moulsdale Williams, Mrs. E.	0	10	6
Prestwich Corporation	1	1	0	Newcastle-upon-Tyne Corporation	5	5	0
Radcliffe Corporation.....	1	1	0	Newcastle & Gateshead Gas Co.	5	0	0
Refuge Assurance Co.....	5	5	0	Power Gas Corporation Ltd.	1	1	0
Rhyl U.D.C.	1	1	0	Stanley U.D.C.	3	3	0
Rochdale Corporation	3	3	0	Stockton-on-Tees Corporation	5	0	0
Royton U.D.C.	1	1	0	Sunderland Corporation.....	5	5	0
St. Helens Corporation	1	1	0	Whitley Bay U.D.C.	1	1	0
Sale Corporation	2	2	0	Division 5—Yorkshire			
Salford Corporation	2	2	0	Batley Corporation.....	1	1	0
Salford Corporation Gas Dept.	2	2	0	Bingley U.D.C.	2	2	0
Shaw, Roy	0	5	0	Bonner, J. R.	0	5	0
Simon, Sir Ernest	2	2	0	Bradford Corporation Gas Department	1	1	0
Simon-Carves Ltd.	5	5	0	Bray, George & Co.	1	1	0
Smith, Herbert*	5	5	0	Brighouse Corporation	2	2	0
Southport Corporation	1	1	0	Brighouse Corporation Gas Committee	3	3	0
Stalybridge Corporation ...	1	1	0	Brooke, E. R. M.	0	10	6
Stockport Gas Committee	2	2	0	Brown, G. L.	2	2	0
Stretford Corporation.....	3	3	0	Bullwinkle, C.	0	10	6
Stretford and District Gas Board	5	5	0	Castleford U.D.C.	2	2	0
Swinton and Pendlebury Corporation	2	2	0	Clayton, Son & Co. Ltd. ...	2	2	0
Taylor, H. Frankland	0	12	6	Clegg, Ernest	0	10	6
Tootal, Broadhurst, Lee & Co. Ltd.	3	3	0	Colne Valley U.D.C.	1	1	0
Urmston U.D.C.	8	8	0	Coke Oven Manager's Association	1	1	0
Wallasey Corporation.....	10	10	0	Craddock, H.	0	10	6
Warrington Corporation ...	5	5	0	Doncaster Corporation	1	1	0
Welshpool Gas Co. Ltd. ...	1	1	0	Elland-cum-Greetland Gas Co.	2	2	0
West's Gas Improvement Co. Ltd.	5	5	0	Elwell, Mrs. E.	0	10	6
Whiston R.D.C.	1	1	0	Goldstern, Walter	0	10	6
Widnes Corporation	5	5	0	Goodfellow, J.	0	10	6
Winsford Gas Co. Ltd.	2	2	0	Goole Corporation Gas Works	1	1	0
Wrexham Corporation	5	5	0	Great Grimsby Gas Co. ...	1	1	0
Young, J. W.	1	1	0	Graucob, F. Ltd.....	1	1	0
Division 4—North-East				Grimsby Corporation	1	1	0
Adwick-le-Street U.D.C. ...	2	2	0	Halifax Corporation	2	2	0
Angus, Col. E.G.	3	3	0	Harrogate Corporation	4	4	0
				Harrogate Gas Co.	6	6	0

	£	s.	d.
Hebden Royd U.D.C. Gas Department.....	1	1	0
Holmes, W. C. & Co. Ltd....	5	5	0
Holmes, W. G.*	2	0	0
Huddersfield Corporation ...	1	1	0
Hull Corporation.....	1	1	0
Keighley Corporation.....	1	11	6
Leeds Corporation,			
1944 Balance	5	5	0
1945	15	15	0
Leeds Corporation Gas Department.....	25	0	0
Leeds Corporation Electricity Dept.	1	1	0
Lister, H. & Sons Ltd.	2	2	0
Marshall, G. C.	0	5	0
Mirfield U.D.C. 1944 Balance	1	1	0
Mirfield U.D.C. 1945	2	2	0
Morley Corporation	1	1	0
Neill, W. C. H.	0	10	6
Nicholson, Philip B.	0	10	6
Pickston, J. (1943-6)	2	2	0
Pudsey Corporation	1	1	0
Rothwell U.D.C.....	2	2	0
Scarborough Corporation ...	2	2	0
Scarborough Gas Co.	1	1	0
Severs, J. S.*	2	0	0
Sheffield & District Gas Co.	10	10	0
Sheffield, Rotherham and District Smoke Abatement Committee	50	0	0
Shipley U.D.C.	1	1	0
Slagg, J. H.	0	5	0
Spenborough U.D.C.	1	1	0
Spenborough U.D.C. Gas Dept.....	2	2	0
Turner, T. Henry*	0	10	6
Wakefield Corporation	3	3	0
Wakefield Gaslight Co. 1944 Balance.....	1	1	0
Wakefield Gaslight Co. 1945	5	5	0
Warwick, Henry	0	10	6
Wood, F. T.....	0	10	6
Yeadon & Guiseley Gas Co.	1	10	0
York Corporation	2	2	0
Yorkshire Electric Power Co.	10	10	0
Yorkshire Gas Coke Association	25	0	0
York Gas Co.	6	6	0

Division 6—West Midlands

Allday, Wm. & Co. Ltd. ...	5	5	0
Barrow, Harrison	0	5	0
Bilston Corporation	1	1	0
Birmingham Corporation ...	5	5	0
Birmingham Corporation Gas Dept.....	5	5	0
Brierley Hill U.D.C.	2	2	0
Burton-upon-Trent Corporation	1	1	0
Cadbury Bros. Ltd.	2	2	0

	£	s.	d.
Cannock District Gas Co. Ltd.	3	3	0
Coventry Corporation	5	5	0
Dudley, Brierley Hill & District Gas Co.	1	1	0
Harris, L. G. & Co. Ltd. ...	1	11	6
Hayes, Mrs. A. L.	0	10	6
Herbert, Alfred Ltd.	1	1	0
Hutchinson, G. H.	0	10	6
Iron Bridge & District Gas Co. Ltd.	2	2	0
Johnson, R.	0	10	6
Kidderminster Corporation	1	1	0
Kidsgrove Gaslight Co.	3	3	0
Ludlow Union Gas Co. Ltd.			
1944 Balance	1	2	0
1945	2	2	0
Malpas Gas Co. Ltd.	1	1	0
Market Drayton Gas Co. ...	2	2	0
Midlands Joint Advisory Council for Smoke Abatement	1	1	0
Newcastle-under-Lyme Corporation	2	2	0
Oldbury Corporation	2	2	0
Radiation Ltd.	25	0	0
Redditch Gas Co. Balance			
1944	1	1	0
1945	2	2	0
Ritchie, F. E.	0	10	6
Rowley Regis Corporation	2	2	0
Rugeley Gas Co.	2	2	0
Shrewsbury Gas Light Co....	6	6	0
Smart, R. Cecil	0	5	0
Smethwick Corporation	2	2	0
Solihull Gas Co.	1	1	0
Stafford Corporation	1	1	0
Stephens, H.	1	1	0
Stoke-on-Trent Corporation	5	5	0
Stoke-on-Trent Gas Dept....	1	1	0
Stone Gas Light & Coke Co.	2	2	0
Stourbridge Gas Dept.	1	1	0
Stourport Gas Co.	3	3	0
Tamworth Gas Light & Coke Co.....	3	3	0
Taylor, Percy W.	0	10	6
Tenbury Union Gas Co. Ltd.	1	1	0
Tresize, William E.....	1	1	0
Uttoxeter Gas Co.	2	2	0
Wall, John M. Ltd.	1	1	0
Walsall Corporation	2	2	0
Wednesbury Corporation ...	2	2	0
Wellington (Salop) Gas Co.	3	3	0
Wem Gas Light & Coke Co. Ltd.	1	1	0
West Bromwich Corporation	1	1	0
Whitchurch (Salop) Gas Co Ltd	2	2	0
Wilkins, Dr. E. H.	0	10	6
Willenhall U.D.C.	1	1	0

	£	s.	d.		£	s.	d.
Wolverhampton Corporation				Cheltenham Corporation	2	2	0
Electricity Dept.	1	1	0	Cheltenham & District Gas			
Wolverhampton Gas Co.	5	5	0	Co.	1	1	0
Division 7—East Midlands				Chepstow Gas Co.	2	2	0
Ashwell & Nesbit Ltd.	0	5	0	Clevedon & Yatton Gas Co.	1	1	0
Bakelite Ltd.	2	2	0	Coulthurst, Mrs. M.	0	10	6
Beeston & Stapleford U.D.C.	1	1	0	Dixon, Thomas	0	10	6
Boston Corporation	2	2	0	Ebbw Vale U.D.C.	1	1	0
Cambridge Corporation	1	1	0	Exeter Gaslight & Coke Co.	2	2	0
Cambridge University &				Fry, Miss Agnes	10	10	0
Town Gaslight Co.	1	1	0	Gloucester Corporation	2	2	0
Charlesworth, Mrs.	0	5	0	Gloucester Gas Light Co. ...	5	5	0
Chesterfield Corporation ...	2	2	0	Hereford Corporation	1	1	0
Clarke, Dr. R. T. V.	0	10	6	Leominster Gas & Coke Co.	2	2	0
Coote & Warren Ltd.	1	1	0	Monmouthshire & South			
Corrin, H. R.	0	10	6	Wales Coal Owners' Asso-			
Dearden, John	0	10	6	ciation	100	0	0
Fry, Miss A. Ruth	3	3	0	Monmouth Gas & Water			
Great Yarmouth Gas Co.	2	2	0	Works Co. Ltd.	2	2	0
Gurney, John	3	3	0	Morgan, D. & Sons.	1	1	0
Gurney, John (Donation) ...	50	0	0	McGhie, A. T. S.	0	10	6
Heanor U.D.C.	1	1	0	Newport Corporation	2	2	0
Hinckley U.D.C.	1	1	0	Newport Gas Co.	5	5	0
Ipswich Gas Co. Ltd.	6	6	0	Rhondda U.D.C.	2	2	0
King's Lynn Corporation ...	1	1	0	Rogers, Phil*	2	2	0
Kirkby-in-Ashfield U.D.C.	1	1	0	Ross Gas Co. Ltd.	6	2	0
Leicester Corporation	10	10	0	Sanger, Mrs. A. D.*	6	0	0
Leicester Corporation Gas				Seale, Mrs. I. L.	0	10	6
Dept.	3	3	0	Shaftesbury, Lady	11	10	0
Lincoln Corporation	5	5	0	Silburn, Mrs. E.	0	10	6
Long Eaton Gas Co.	3	3	0	Stroud Gaslight & Coke Co.	3	3	0
Lowestoft Gas Co.	2	2	0	Swindon Corporation	2	2	0
Mansfield Corporation	1	1	0	Swindon United Gas Co. ...	5	5	0
Melton Mowbray Gas Light				Wales and Monmouthshire			
& Coke Co.	3	3	0	Association of Gas En-			
Messenger, Mrs. E.	0	10	6	gineers and Managers.	1	1	0
McHugh, F. G.	0	5	0	Weston-Super-Mare Corpor-			
Nottingham Corporation ...	5	5	0	ation	2	2	0
Pearson, Dr. S. Vere	0	10	0	Division 9—South-East			
Swadlincote District U.D.C.	1	1	0	Acton Corporation	2	2	0
Uppingham Gas Light &				Acworth, Miss E. A.	1	1	0
Coke Co. Ltd.	1	1	0	Acworth, Miss W. B.	2	2	0
Verrall, Brian H.	1	0	0	Alston, Dr. J. M.	1	1	0
Wright, J.	1	1	0	Andover Lighting & Power			
Division 8—South-West				Co.	2	2	0
Bath Corporation	1	1	0	Ascot District Gas and			
Bath Gas Co.	2	2	0	Electricity Co.	2	2	0
Bidford on Avon Gas Co.				Ascot Gas Water Heaters			
Ltd.	1	1	0	Ltd.	10	10	0
Bradshaw, Miss G.	0	5	0	Associated Gas & Water			
Bristol Corporation	5	5	0	Undertakings Ltd.	5	5	0
Bristol Gas Co.	5	5	0	Atkinson, Mrs. M.	1	0	0
Bromyard Gas Co. Ltd.	1	1	0	Averill, C. R. Ltd.	1	1	0
Brynmawr & Blaina Gas Co.	1	1	0	Banbury Gas Light & Coke			
Caldicot & Dist. Gas Light				Co.	1	1	0
& Coke Co. Ltd.	2	2	0	Barber, Stanley S.	0	10	6
Campbell, Dr. Arthur F. ...	0	10	6	Barker, W. E.	0	10	6
Campden Gas Co. Ltd.	2	2	0	Barking Corporation	1	1	0
Cardiff Corporation	5	5	0	Barlow, Sir Thomas	0	10	6
Cardiff Gas Light & Coke Co.	3	3	0	Bastian & Allen Ltd.	2	2	0

	£	s.	d.		£	s.	d.
Baxter, F/O W. L.....	1	1	0	Finsbury Corporation.....	2	2	0
Beard, J. R.	1	1	0	Folkestone Gas & Coke Co.	2	2	0
Beit, Sir Alfred	1	1	0	Foster Instrument Co. Ltd.	2	2	0
Bennett, M. J.....	1	0	0	Foss, Mrs. A.*.....	1	10	6
Berry, Dr. J. A.	3	1	0	Fox, Frank	0	10	0
Bethnal Green Corporation	1	1	0	Gandy, Miss R. L. *	0	10	6
Binderman, Mrs. A.	0	5	0	Gas Companies Protection			
Bognor Gas & Electricity Co.	1	1	0	Association	10	10	0
Bonstow, T. L.	0	10	6	Gas Consolidation Ltd.....	5	5	0
Bournemouth Corporation...	2	2	0	Gas Light & Coke Co.....	52	10	0
Bournemouth Gas & Water				General Electric Co. Ltd....	10	10	0
Co.	2	2	0	Gillison, Dr. J. A.*.....	1	1	0
Braidwood, G. L.	0	10	6	Godalming Gas & Water Co.			
Brighton Corporation, 1944	2	2	0	Ltd.	1	1	0
1945	2	2	0	Goodchild, C. R.....	1	0	6
Brighton, Hove & Worthing				Goodchild, J. R.....	0	5	0
Gas Co.....	5	5	0	Gosport Corporation	1	1	0
British Electrical & Allied				Gravesend Corporation	2	2	0
Manufacturers' Associa-				Gravesend & Milton Gas			
tion	10	10	0	Light Co.	2	2	0
British Electrical Develop-				Greenwood T. A. S.	1	10	0
ment Assoc.....	100	0	0	Guildford Corporation	1	1	0
British Gas Council and				Guildford Gas Light & Coke			
Institution of Gas Engineers	262	10	0	Co.	2	2	0
British Gas Light Co. Ltd....	5	5	0	Hadley, Lt. H. S.	5	0	0
British Medical Association	2	2	0	Hammersmith Corporation	1	1	0
Broadstairs Gas Co.	1	1	0	Harrow U.D.C.	2	2	0
Brookes, T. H.	0	10	6	Hastings & St. Leonards Gas			
Bury, John D.....	0	10	6	Co.	3	3	0
Buzzacott, J. O.....	2	2	0	Hayes & Harlington U.D.C.	2	2	0
Cable Makers' Association...	10	10	0	Herne Bay Gas Co.....	1	1	0
Cadbury, Mrs. G M	1	1	0	Hessle Gas Co.....	1	1	0
Camberwell Corporation ...	1	1	0	Heston & Isleworth Corpor-			
Capper-Johnson, Dr. L	0	10	6	ation	2	2	0
Chantler, Philip*	2	0	0	Hodgkinson, James (Salford)			
Charrington, Gardner, Locket				Ltd.	1	1	0
& Co Ltd.	1	1	0	Holborn Corporation	1	1	0
Chertsey Gas Co.....	2	2	0	Horner, Lord	0	10	6
Chingford Corporation	1	1	0	Hornchurch U.D.C.	1	1	0
Chislehurst & Sidcup U.D.C.	1	1	0	Hyland, Alfred	0	10	0
Chubb, Sir Lawrence.....	2	2	0	Ideal Boilers & Radiators			
Clarke, David K.	0	10	6	Ltd.	5	5	0
Clinch, H. G.	0	10	6	Institution of Electrical En-			
Coal Utilisation Joint Coun-				gineers	10	10	0
cil, 1944	10	0	0	Institution of Gas Engineers			
1945	10	0	0	(see British Gas Council)			
Croydon Gas Co.....	10	10	0	Institution of Heating and			
Deal & Walmer Gas Co.....	1	1	0	Ventilating Engineers ...	3	3	0
Dormer, A. E.....	0	8	6	International Combustion			
Dover Gas Co.....	3	3	0	Ltd.	1	1	0
Eastbourne Gas Co.	2	2	0	Jast, Mrs. L. S.	0	10	6
East Cowes Gas Co.	1	1	0	Keene, C. E.	1	0	6
East Ham Corporation	2	2	0	Kensington Corporation.....	1	1	0
East Kent Gas Co. Ltd.....	1	1	0	Kirkham, Mrs.	1	1	0
Edmonton Corporation	2	2	0	Kisbee, R. H.	0	10	6
Edwards, Mrs. E. E.	0	10	6	Lea Bridge District Gas Co.	5	5	0
Electrical Association for				Lee, Miss Dora C.	2	2	0
Women	1	1	0	Lessing, Dr. R.*.....	1	1	0
Elsworthy, J. G.*	1	11	6	Lethby, L. E.	0	10	6
Farnborough U.D.C.	1	1	0	Lewes Gas Co.....	1	1	0
Finchley Corporation.....	1	1	0	Lewin, Dr. O. M. S.	1	1	0

PUBLICATIONS—*continued.*

Smokeless Air. The Society's quarterly journal. Regular publication is being maintained though the size has temporarily been reduced. The only magazine in the world devoted to the problems of atmospheric pollution. Gratis to members or 2/6 per annum, post free.

The Law of Smoke Nuisances. By W. R. Hornby Steer, M.A., LL.B., Recorder of South Molton, Standing Counsel to the Society. This book, based on an earlier work by Randolph A. Glen and revised and extended in accordance with the Public Health Acts of 1936, is likely to be accepted as a standard work on the subject. In addition to the explanatory chapters, it contains tables of statutes and cases and the relevant sections from the two Acts and the Local Government Act, 1933. 8vo., 65 pages, 1/- paper-backed; 2/6 cloth bound.

Science Museum Exhibition Handbook. This is not only a detailed guide to the Exhibition, but, containing a series of twelve authoritative articles on the main aspects of the problems, is a permanent and useful reference book. 80 pages, medium 8vo. Price 6d.

Fumifugium : or the Smoke of London Dissipated. By John Evelyn. This rare and fascinating book, first published in 1661 by command of Charles II, has been republished by the Society with an introduction by Rose Macauley. In spite of its age this indictment of the smoke evil by the author of the famous Diaries, remains true, witty and penetrating. Illustrated with original wood engravings and a portrait of Evelyn. Paper covers, 6d. Cloth bound, 1/6.

The State of the Atmosphere. A valuable and informative paper by the late Sir Frank Baines, F.R.I.B.A. With a section on the effects of smoke upon building stone. Royal 8vo, pp. 36. Price 6d.

Smoke and Aviation. Full report of a special conference on this subject. Four papers and discussions. Illustrated. 40 pages 8vo. Price 6d.

Smoke Abatement and Fuel Economy. In steam boiler practice. Published by the Manchester and District Regional Smoke Abatement Committee. 12 pages. Price 1d. By post, 2d.

Britain's Burning Shame. This pamphlet has been described in a review as "a masterpiece of modern popular propaganda." It puts the smoke problem in its simplest terms, especially as it affects the home, and is profusely illustrated. Single copies 2d. 12/6 per 100.

Conference Proceedings. Copies are available at 1/- each of the full reports, containing papers and discussion of conferences held in 1932, 1934, 1936 (2/-), 1937, 1938 and 1943.

Smoke Emission on Chart. A chart of tinted diagrams of different intensities of smoke, for making observations of chimney emissions. The grades shown are pale grey, grey, black and dense black. 3d. each, 2/6 per dozen.

Proceedings of the London Conference, 1943. A complete report of the conference on "Smoke Prevention in Relation to Plans for Post-War Reconstruction," held in London on 5th November, 1943. 24 pages 1/-.

Smoke Abatement in Greater London. Report of a conference of London and Great London Local Authorities, 1938. Including a paper read by Dr. J. S. Owens, A.M.Inst.C.E., M.I.Mech.E., on "The present position and trends of Atmospheric Pollution in Greater London." 22 pages, 6d.

All post free. Reduced prices for quantities.

(See inside front cover for other publications)

The Glittering Prize

THE literally glittering prize of a Britain free from smoke is coming nearer. The main recommendations of the Fuel and Power Advisory Council, which have been accepted by the Ministry, are the latest and most significant proof of a new outlook, and are a gratifying endorsement of a major part of the Society's own policy.

The changing situation means that our work is entering a new phase, and this will now be on a bigger scale and carry greater weight and responsibility than hitherto. The Society's new constitution, itself a sign of natural development, has already led to a strengthening of organization and an increase in income that is coming just in time to help in an ever-increasing activity. But urgent developments are still being delayed and restricted, opportunities slip by, and congestion of work in hand increases. Thus, though the Society is steadily growing, it must, in face of the tasks before it, become far stronger.

Our thanks are tendered to the members and other contributors whose loyal support has made possible the progress already achieved, and will be extended to those who on reading this Report decide forthwith to become members themselves.



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**NATIONAL SMOKE
ABATEMENT SOCIETY** *1947*

**OFFICERS * COUNCIL * DIVISIONS * LOCAL
AUTHORITY MEMBERS * INFORMATION**

**SERVICES * 17th ANNUAL REPORT (1946)
SUBSCRIPTIONS * ACCOUNTS * PUBLICATIONS**

Recent Publications of the Society

Proceedings of the Brighton Conference, 1946. A full record of Papers and Discussions. The principal subjects covered are Smoke Prevention in New Houses, Proposals for New Industrial Legislation, and "What of the Future?" 84 pages, 2/-.

Industrial Smoke Prevention. First draft of the Society's proposals for new legislation (Prior Approval, etc.). 8 pages, 3d.

Constitution. The new constitution of the Society in booklet form. 8 pages, 2d.

Smokeless Zones. A booklet explaining the Society's proposals for ending the smoke nuisance by the setting up of smokeless zones. 3d.

February 1945 Joint Conference. Report of the joint conference with the Institute of Fuel, London, 23rd February, 1945. 8 papers and discussions, 45,000 words. 2/6.

Domestic Fuel Efficiency and Smoke Prevention. Report of joint conference with the N.W. Section, Institute of Fuel, Manchester, 14th November, 1945. Papers by Dr. G. E. Foxwell, Charles Gandy and Arnold Marsh, and discussion. 1/-.

Smoke Control. Suggestions to Local Authorities on Guidance and Control in respect to new Fuel Burning Installations. 8 pages, 3d.

The Smoke Problem and Science Teaching. A booklet for teachers, with notes and experiments. 8 pages, 3d.

No Clean City. An illustrated pamphlet showing the need for smoke prevention in post-war reconstruction. 16 pages, 2d.

Plan for Clean Air. An easily read outline of the Society's proposals and "Ten Year Plan" in the form of a "quiz" of twenty questions and answers. A useful publication to hand to the uninformed. 8 pages, 2d.

All post free.

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National Smoke Abatement Society

1947

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Central Offices

CHANDOS HOUSE, BUCKINGHAM GATE, WESTMINSTER, S.W.1

ABBeY 1359

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John Gurney, B.Sc., M.A., J.P.
Alfred Wade, F.R.San.I.

South Western Division

F. J. Redstone, F.S.I.A., M.R.San.I.
A. Tyler, F.S.I.A., M.R.San.I., M.R.I.P.H.H.

South Eastern Division

R. A. Baskett, M.S.I.A., B.E.M.
H. G. Clinch, F.R.San.I., F.S.I.A.
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J. J. Matthews, M.R.San.I.
H. L. Snowden, M.S.I.A.
L. A. Stroud, D.P.A., M.R.San.I.
S. Swift, M.B.E.
J. S. Ratcliffe
Mrs. H. A. Des Voeux

Local Authority Members

to 31st January, 1947

Division 1. Scotland

Airdrie	Dundee	Hamilton	Paisley
Clydebank	Edinburgh	Johnstone	Renfrew
Coatbridge	Falkirk	Kirkintilloch	Renfrewshire C.C.
Dumbarton	Glasgow	Lanarkshire C.C.	Rothsay
Dunbarton C.C.	Greenock	Motherwell and Wishaw	

Division 2. North-West

Barrow-in-Furness	Crosby	Marple	Sale
Blackburn	Denton	Middleton	Salford
Blackpool	Failsworth	Nantwich	Stalybridge
Bolton	Farnworth	Nelson	Stockport
Bootle	Glossop	Newton-le-Willows	Stretford
Burnley	Horwich	Oldham	Swinton and Pendlebury
Bury	Hyde	Preston	Urmston
Buxton	Irlam	Radcliffe	Wallasey
Carlisle	Lancaster	Rhyl	Widnes
Chadderton	Liverpool	Rochdale	Wrexham
Chester	Macclesfield	St. Helens	
Clitheroe	Manchester		

Division 3. North-East

Chester-le-Street R.D.C.	Darlington	Newcastle upon Tyne	Stockton-on-Tees
Chester-le-Street U.D.C.	Easington	Sedgefield	Sunderland
	Gateshead	Spennymoor	Washington
	Houghton-le-Spring	Stanley	Whickham

Division 4. Yorkshire

Adwick-le-Street	Colne Valley	Mexborough	Spenborough
Aireborough	Doncaster	Mirfield	Stocksbridge
Batley	Halifax	Morley	Wakefield
Bingley	Hemsworth	Pontefract	York
Bradford	Huddersfield	Pudsey	Sheffield, Rotherham and Dist. Smoke Abatement Committee
Bridlington	Hull	Redcar	
Brighouse	Keighley	Rothwell	
Castleford	Leeds	Shipley	

Division 6. West Midlands

Bilston	Coventry	Newcastle-under-Lyme	Walsall
Birmingham	Darlaston	Oldbury	Wednesbury
Brierley Hill	Dudley	Rowley Regis	West Bromwich
Burton-upon-Trent	Halesowen	Smethwick	Willenhall
Cannock	Kidderminster	Stoke-on-Trent	Wolverhampton
	Meriden R.D.C.		

Division 7. East Midlands

Beeston and Stapleford	Chesterfield	Kirkby-in-Ashfield	Mansfield
Blackwell	Grimsby	Leicester	Nottingham
Boston	Heanor	Lincoln	Swadlincote
	King's Lynn		

Division 8. South-West

Abercarn	Cheltenham	Hereford	Portishead
Bath	Clevedon	Mynyddislwyn	Swindon
Blaenavon	Cwmbran	Newport (Mon.)	Thornbury R.D.C.
Bristol	Ebbw Vale	Pontypridd	Tredegar
Cardiff	Gloucester		

Division 9. South-East

Acton	Erith	Hornchurch	Slough
Barnes	Eton R.D.C.	Letchworth	Southall
Battersea	Farnborough	Lewisham	Southampton
Bexley	Feltham	Leyton	Southend-on-Sea
Brighton	Finchley	London, City of	Stepney
Camberwell	Fulham	Luton	Sutton and Cheam
Chatham	Guildford	Malden and	Tottenham
Chelsea	Hackney	Coombe	Twickenham
Chingford	Hammersmith	Merton and Morden	Uxbridge
Chislehurst and Sidcup	Harrow	Oxford	Wanstead and Woodford
Crayford	Hayes and	Paddington	Wembley
Dartford	Harlington	Reading	Westminster
East Ham	Heston and	Richmond	Willesden
Edmonton	Isleworth	St. Pancras	Wimbledon
	Holborn	Shoreditch	

Other Local Authority Contributors

Accrington, Barking, Bethnal Green, Birkenhead, Bournemouth, Cambridge, Carshalton, Chorley, Deptford, Derby, Durham, Enfield, Finsbury, Gosport, Gravesend, Greenwich, Hebden Royd, Hinckley, Kensington, Lambeth, Mitcham, Poplar, Portsmouth, Royton, Scarborough, Southport, Southwark, Stafford, Wandsworth, Watford, West Ham, Weston-super-Mare, Whiston, Whitley Bay, Wood Green, Vereeniging (S.A.).

Scottish Divisional Council

Chairman: Allan W. Ritchie, M.B.E.,
F.R.San.I.

Hon. Secretary: John Traill, B.L.

Secretary's Office: City Chambers,
Glasgow.

Central 9600
Ext. 220

North West Divisional Council

Chairman: Alderman T. Halstead, J.P.

Hon. Secretary: H. Moore

Secretary's Office: Public Health Dept.,
Town Hall,
Manchester.

Central 3377
Ext. 339

Seventeenth Annual Report

for the Year ended 31st December, 1946

GENERAL REVIEW

The year 1946 has been of outstanding importance in the campaign for clean air. It has seen the first legislation for smokeless zones and for the prior approval of new fuel-burning installations, and on the domestic side has been marked by the general acceptance by the Government of a fuel policy that includes, on lines closely following the Society's own proposals, the progressive abolition of smoke. The Society itself can also report a further year of all-round progress and the successful beginning of work under its new constitution.

Domestic Fuel Policy

The Fuel and Power Advisory Council of the Ministry of Fuel and Power, under the Chairmanship of Sir Ernest Simon (a Vice-President of the Society), issued its report on *Domestic Fuel Policy* early in the year. One of the terms of reference of the Council was to consider the abatement of smoke from household fires, and in its recommendations this factor is integrated into the general policy in an entirely satisfactory way. The fact that the recommendations should so closely follow the policy that had been developed and pressed for by the Society is a gratifying tribute to the latter's practical understanding of the problems involved. The Report, published by H.M. Stationery Office, was reviewed in *SMOKELESS AIR* (Spring, 1946, No. 60).

Preceding this important report was the more technical *Heating and Ventilation of Dwellings*, a report of a Committee of the Building Research Board, under the chairmanship of Sir Alfred Egerton, which also stressed the importance of smoke prevention, and included an informative appendix on Atmospheric Pollution. As a result of these reports the Government has accepted a policy that includes the progressive substitution of the coal-burning open fire by improved fires and stoves suitable for smokeless fuel. Production of these new appliances is still not sufficient for even all the new

houses, although it is stated that this will be remedied during 1947, which will make it possible for the Society to press for the implementation of the Simon Report recommendations, that the installation of improved appliances in new houses should be a condition of subsidy, and will also make it practicable to propose a beginning of the replacement of old by new appliances in existing houses—starting preferably in areas to become smokeless zones.

The present difficult fuel situation, and the time that must elapse before the production of solid smokeless fuel can be sufficiently expanded makes it impossible to urge early measures to ensure the use of smokeless fuel in the new appliances, but it is satisfactory to note that it has been authoritatively stated that a progressive increase in smokeless fuel production will be one of the foremost tasks of the National Coal Board. It is also satisfactory to note that an Interdepartmental Committee for Domestic Heating of the Ministries concerned—Health, Fuel and Power, Works and Supply—has been set up.

It may be emphasized that the Society's concern in recent years with solid fuel appliances does not in any way lessen its interest in other forms of smokeless heating, particularly the public utilities of gas, electricity and district heating. The open coal fire remains, however, the hard kernel of the problem, and can remain, with a consequent continuation of the smoke nuisance, in houses generously provided with the public utility services. The latter are smokeless in any case, but the open fire is smokeless only if it is made suitable for, and actually uses, smokeless fuel. As between the public utility systems themselves, the Society remains completely unbiased, because each can promote smokelessness. Debate on their relative merits and comparisons of their technical and economic features is naturally of interest, but does not affect the common factor of smokeless-

ness, with which the Society is solely concerned.

Industrial Smoke

Because of the scarcity of fuel, which results in poor quality or unsuitable coal being used in many industrial plants, leading to forcing of boilers and other faults, together with a widespread need for plant replacements and extensions, there has been a tendency for industrial smoke emissions to increase. This has perhaps been offset in the aggregate by the continued drive for fuel efficiency, but there does appear to have been an increased number of complaints about specific nuisances. It is particularly regrettable that these should include a number of complaints about pollution said to be due to the manufacture of smokeless mediums—at gas and other carbonizing plant and electricity generating stations. Our friends in these industries will appreciate our anxiety about the existence of complaints from the processes supplying the means for smokelessness.

An easing of the fuel supply situation, and the provision of new plant and equipment where it is needed, will make possible, from the smoke prevention viewpoint, the fuller fruition of the fuel efficiency campaign of the Ministry of Fuel and Power. The big “Fuel and the Future” conference in London in October was an event of importance for the future progress of fuel efficiency and less smoke. Also of considerable value to smoke prevention has been the excellent *Stoker's Manual* published during the year by the Ministry.

New Legislation

Two of the main features of the Society's policy, both of which have been

developed only during the last few years, are now to be found on the statute book; namely, the smokeless zone and prior approval principles. To set up smokeless zones, not only in the centre but in other parts of the city, and to require the prior approval of all new steam-raising and other industrial or trade installations are important sections of the Manchester (General Powers) Act, 1946, and powers to make byelaws for the prior approval of new installations are included in the City of London Act, 1946. Both Acts are described in some detail in *SMOKELESS AIR* (Autumn-Winter, 1946, No. 62). The importance of these Acts to the Society, if only for the precedents they create, needs no emphasis.

An interesting development in planning for smokelessness is the setting up in Bristol of a co-ordinating Smoke Prevention Committee of all the interested Committees of the City Council. In Sheffield the Society's suggestion in *Smoke Control* has been acted upon by including a smoke control clause in all leases of Corporation-owned land to be used for industrial purposes.

Regional Committees

The Regional Committees for Northumberland and Durham, and West Lancashire and Cheshire have not yet resumed operations after their war-time suspension. Elsewhere the Regional Committees are usefully developing their activities—that is, the West Riding of Yorkshire, Manchester and District, the Midlands, Bristol and District, and Greater London. The Society is in most friendly relations with all of the Committees and values their work as a complement to its own.

THE SOCIETY

The New Constitution

The adoption of a new, and more ambitious constitution in October, 1945, has been an unqualified success. The new system of nominations and ballot for the Executive Council by Divisions has resulted in the formation of a strong Council in which each part of the country is represented. The increase in subscriptions for many Corporate, Institution and Local Authority Members met with a gratifying response, and all but 32 local authorities (who, however, continue to make an annual donation) out of a total

of 217 have agreed to subscribe on the new scale. 72 out of 202 Corporate and Institution subscribers are full members.

Although the area Divisions already exist for electoral purposes, only two Divisional Councils have so far been set up. One is the Executive Committee of the former Scottish Branch, and the other the North West Divisional Council, which takes the place of, though covering a wider area than, the former North West Branch, the members of which have become members of the National Society. It is hoped that Councils will be set up

in other Divisions in the near future.

As its first President under the new constitution the Society is fortunate in having Sir George Elliston. Sir George is Chairman of the Public Health Committee of the Common Council of the City of London and Editor of "The Medical Officer." He was formerly a Member of Parliament and secretary of the Society of Medical Officers. His support and advice have already been of great value, and those who were present will have appreciated his Presidential Address at the Brighton Conference.

Will Melland, our previous President, was designated Past President, and so his long association as an office bearer of the Society remains unbroken, despite the ill-health that so regrettably now debars him from active participation in our work.

Annual Meetings

An annual general meeting was held in London on 21st March, 1946, for the purpose of receiving the Annual Report for 1945, the statement of accounts and the results of the elections for President, Hon. Treasurer and Executive Council. The election of Vice-Presidents, which under the new constitution was to be carried out by nomination and election by those present and voting at the Annual General Meeting, proved to be difficult, and the election was delegated to the Executive Council. The names of those duly elected are given on the second page of this report. The method of election of Vice-Presidents was subsequently considered by the Executive Council, and at a Special General Meeting held at Brighton on 24th October an amendment to the constitution was adopted by which Vice-Presidents shall be nominated and elected by post, under procedure similar to that laid down for the other Officers.

Annual Conference

The first full scale Annual Conference since that held in Cardiff in 1938 took place at Brighton from 24th to 26th October. Its success was shown by a record attendance of 409, and by the fact that the proceedings received a greater number of Press reports than any other event organized by the Society. Over 200 local authorities were represented, including 76 who were non-members. The Society was privileged to receive a most encouraging message from the Lord President of the Council, the Rt. Hon. Herbert Morrison, M.P., who regretted that he could not be present

and referred to the Society's work as being of the highest national importance.

The programme consisted of three main sessions, as follows. (1) *New Housing*: this took the form of reports, based on the replies to a questionnaire to local authorities, prepared and presented by each of the Regional Committees or, in other areas, by representatives of the Society. (2) *Industrial Smoke*: papers from different viewpoints were read on the proposals for new legislation formulated by the Society. (3) *The Future*: a general discussion on the lines on which progress should be attempted, opened with a paper by Mr. Gandy. A series of resolutions was passed at the end of the conference.

The success of the event was enhanced by the hospitality of the Brighton Corporation, which kindly put the whole of the Royal Pavilion at the disposal of the Society. There was a civic welcome by His Worship the Mayor of Brighton, and an evening reception given by the Mayor and Mayoress. A reception by invitation of the President and Council was also given.

Other Meetings

On 25th February a successful joint meeting with the Yorkshire section of the Institute of Fuel was held at Doncaster, at which papers were read on the domestic problem, industrial smoke, and that from metallurgical processes. A joint meeting was held at Nottingham with the East Midland section of the Institute of Fuel on 16th May at which a paper on the prevention of industrial smoke was discussed. On 28th November there was a joint meeting with the Liverpool section of the Institute and the Merseyside Civic Society in Liverpool, at which the domestic problem was discussed. The Annual Meeting of the Scottish Branch took place in Edinburgh on 14th May, and at a meeting of members of the North West Division in Manchester on 18th July a Divisional Council for the area was elected.

Obituary

We regret to record the death, on 12th August, of R. H. Clayton, of Manchester, one of the Society's oldest and most active members. He was until recently a member of the Executive Committee and had been interested in smoke abatement for forty years or more. A fuller tribute to Mr. Clayton appeared in SMOKELESS AIR (Summer, 1946, No. 61).

Council and Committees

The new Executive Council of 33 members, drawn from each of the Society's Divisions in proportion to the membership of each, was elected in March and met three times between then and the end of the year. Mr. Charles Gandy was elected Chairman, and Mr. J. W. Beaumont Deputy Chairman. As required by the new constitution three Committees have been set up, as follows : General Purposes and Finance, with Mr. Gandy as Chairman ; Publicity, with Mr. John Gurney as Chairman ; and Technical, with Dr. R. Lessing as Chairman.

Proposals for New Legislation

After a period during which the domestic problem has received primary attention the chief development in policy has been the publication of provisional proposals for new legislation to control industrial smoke. These proposals are for an extension of the Public Health Act, 1936, to permit byelaws requiring the prior approval of new fuel-burning plant, control over the maintenance and operation of existing plant, and the registration of firemen operating plant from which smoke emission is possible. These were discussed at Brighton and received general approval, although with some reservations on the question of the registration of firemen. The original draft is being re-examined by the Technical Committee, with a view to revision and subsequent discussion with other interested bodies.

Exhibitions

By invitation of the Solid Smokeless Fuels Federation the Society took part in a large and comprehensive "Good Heating for Every Home" exhibition in the Royal Horticultural Hall, Westminster, in March. The Society's stand attracted much attention and the exhibition did a great deal to demonstrate and make known the considerable developments that have taken place in appliances for the use of solid smokeless fuel in the home.

Exhibition material has been loaned for smoke abatement stands during the year for Local Government and other exhibitions in Farnborough, Hull, Barrow, Accrington, Darlaston, Wrexham, Retford, Stretford, Edinburgh, Bradford, Sidcup, Sunderland, Huddersfield, Luton, Islington and St. Albans. There is considerable scope for extending this service, limited at present by the small amount of

material available and by shortage of staff. This field of propaganda is being examined by the Publicity Committee.

Services

Exhibition work may be regarded as one of the "services" offered to members and others. The growing interest in smoke prevention is increasing the demand for the services of the Society in other respects, including general and technical information, publications, assistance to journalists, other writers, and lecturers, advice on smoke nuisance cases, loans of photographs, and so on. The principal difficulty arising from the growth of this work, which emphasizes how much the Society is becoming, among other things, a sort of central bureau of information on smoke abatement and allied matters, is the time diverted from other activities at headquarters. With a larger staff, which can only be secured when a substantially larger income is assured, the Society's services could be expanded very considerably.

Publications

It has not been possible, owing to pressure of other work, to issue any new publications since *Smoke Problem and Science Teaching*, to which reference was made in the last annual report, with the exception of *Industrial Smoke Prevention*, containing the provisional proposals for new legislation already referred to, and, of course, *SMOKELESS AIR*. An increased paper allowance for the latter will make it possible to revert to four issues during the year 1947, instead of the three that have been issued during each of the last three years. *The Proceedings of the Brighton Conference, 1946*, will have appeared before the publication of the present report, and will be seen to be a substantial volume of papers and discussions.

Local educational authorities were approached with respect to the sale and distribution among teachers of the *Science Teaching* pamphlet. This has resulted in a sales and free distribution amounting to 4,250 copies to date. It is believed, judging by the interest that is apparent, that the projected *Health and Home Teaching and the Smoke Problem* will be equally or even more successful. This is one of several publications to be prepared and issued as soon as possible.

Speakers' Panel

A new Panel of Speakers on smoke and related problems is now in preparation and will be issued as a folder and distributed among organizations likely to be interested. Members and Representatives who feel they are qualified to speak at meetings—even if only to give informal talks at small local meetings—are invited to inform the Secretary. Inclusion in the panel does not, of course, involve any obligation to accept any particular invitation to speak. Notes for the assistance of speakers are also to be issued.

Membership and Finance

The annual statement of accounts and balance sheet, which follow, will show that the Society's income and financial position have continued to improve, and a further small increase from present membership because of the new constitution can be anticipated. Expenditure is, however, also increasing, partly as a result of increased office rent and new and augmented salaries, and partly because of the steady expansion of general activity. Activities in fact show a continued tendency to expand more rapidly than can efficiently be undertaken. The only remedy is, of course, an increase in income to make possible a larger staff and material resources.

A proportion of the available resources must therefore be diverted to appeals for membership. At the end of the year under review a drive was begun to secure the membership of further local authorities, and this will be followed by other appeals.

Staff and Office

In January last the staff was augmented by the engagement of Mr. V. Silver, who had recently been demobilized, with the rank of Captain, from the Army, in a new post of organizing assistant, and in October Mrs. E. E. Snelgrove was appointed to fill a vacancy as secretarial assistant and accountant. A junior assistant, Miss J. Burt, was appointed last year. With the general secretary there is thus a headquarters staff of four.

The work undertaken at headquarters may be divided into the following departments: (1) General administration and Accounts, including conference organisation; (2) Editorial, including *SMOKELESS AIR*; (3) Council and Committees; (4) Intelligence, including library and information records; (5) Services; and (6) Special publicity, appeals and other activities. The first three are normally given priority, the fourth is in urgent need of reorganization and development, while the last two are undertaken as far as practicable, which at present amounts to very little compared with what might and should be done. This indication of the scope of the work being attempted is given so that members may appreciate the anxiety of the Officers and Council to see developments in the Society's material position comparable with the important developments in the general situation that are recorded in the first part of this report.

CHARLES GANDY, *Chairman of Council.*

LAWRENCE CHUBB, *Hon. Treasurer.*

ARNOLD MARSH, *General Secretary.*

January, 1947.

If you are not a Member . . .

we are sure you will agree that the above Report proves the usefulness of the Society and the need it has for more support. If a Membership application form is enclosed we invite you to complete and return it to the Society. Particulars of subscriptions, etc., are given on pages 17 and 18. Or, without any obligation, send a postcard to the Society asking for more information about the campaign for smoke-free air and specimen copies of publications.

Income and Expenditure Account, Year ended June 30th, 1946

INCOME		EXPENDITURE	
1945	1946	1945	1946
£ s. d.	£ s. d.	£ s. d.	£ s. d.
Subscriptions and Donations ...	2,220 10 0	Salaries and Fees ...	1,337 6 4
Sale of Literature ...	30 16 8	Rent, Rates, Lighting and Heating ...	265 9 2
Repayment of Income Tax ...	—	Printing and Stationery ...	322 5 4
Conference Fees ...	143 17 0	Travelling Expenses ...	70 13 5
DIVIDENDS FROM INVESTMENTS, ETC.—		General Expenses, Postages and Telephone	307 15 0
Commercial Union Assurance Co.	4 10 10	Printing <i>Smokeless Air</i> —	137 16 11
London, Midland & Scottish Rly. Co.	9 7 9	Less Receipts from Advertisements ...	75 9 3
(1½ years)		Printing Booklets <i>The Smoke Problem and Science Teaching</i>	50 0 0
Interest—Manchester & Salford Savings Bank	11 9 10	Staff Pension Scheme ...	65 11 2
Post Office Savings Bank	—	Furniture and Fittings ...	288 14 11
Sundry Receipts ...	10 6	Surplus of Income over Expenditure	£2,921 1 6
£2,421 2 7	£2,921 1 6		

Defence Bond Fund

1945	1946
£ s. d.	£ s. d.
Balance June 30th, 1945	471 12 7
Interest ...	—
£471 12 7	£485 14 3

Balance Sheet, June 30th, 1946

1945	1946
£ s. d.	£ s. d.
SURPLUS—	
Balance as at June 30th, 1945	2,043 14 10
Add Surplus of Income over Expenditure	288 14 11
2,043 14 10	2,332 9 9
DEFENCE BOND FUND—	
Balance ...	485 14 3
1,402 1 0	
641 13 10	
2,043 14 10	
471 12 7	
1,446 9 9	
876 0 0	
480 0 0	
5 14 3	
485 14 3	
10 0 0	
£2,515 7 5	£2,818 4 0

Audited and found correct.

(Signed) ABBOTT & SON, Chartered Accountants,

Subscriptions and Donations

for the Year ended 30th June, 1946

* Denotes Covenant Subscriber

Division 1—Scotland

	£	s.	d.		£	s.	d.
Airdrie Corporation ...	3	3	0	*Aitkenhead, Miss M. ...	0	15	6
Clydebank Corporation ...	3	3	0	Altrincham Gas Co. ...	2	2	0
Coatbridge Corporation ...	3	3	0	Andrew, W. H. ...	1	0	0
Dumbarton Corporation ...	2	2	0	Anonymous ...	20	0	0
Dunbarton County Council ...	4	4	0	Anonymous ...	1	0	0
Dundee Corporation ...	10	10	0	Ashton Bros. & Co., Ltd. ...	2	2	0
Falconer, Mrs. J. ...	0	10	6	Ashton Gas Co. ...	3	3	0
Falkirk Corporation ...	3	3	0	Ashton-under-Lyne Electricity Dept. ...	2	2	0
Forrest, Frew & Co. Ltd. ...	0	10	6	Ashworth, Dr. J. R. ...	0	10	6
Glasgow Corporation ...	26	5	0	Barash, Dr. M. ...	0	10	6
Glasgow Corporation Gas Dept. ...	5	5	0	Baxendale & Co. Ltd. ...	2	2	0
Glasgow Women's Citizen Assn. ...	1	1	0	Beard, E. ...	1	1	0
Grattidge, H. H. ...	0	5	0	Beard, J. D. R. ...	0	10	6
Greenock Corporation ...	5	5	0	Beattie, E. & F. Ltd. ...	1	1	0
Hamilton Corporation ...	3	3	0	Behrens, A. ...	0	10	0
Heriot-Wade College ...	1	1	0	Bibby, H. P. ...	2	0	0
Howden, J. & Co. Ltd. ...	10	10	0	Bibby, J. & Sons Ltd. ...	10	10	0
Jewell, Mrs. K. I. ...	0	10	6	Birkenhead Corporation ...	2	2	0
Johnstone Corporation ...	2	2	0	Blackburn Corporation ...	1	1	0
Kirkintilloch Corporation ...	2	2	0	Bolton Corporation ...	13	13	0
Lanark County Council ...	15	15	0	Bootle Corporation ...	4	4	0
Macmillan, A. M. ...	2	2	0	Briggs, C. Rawdon ...	0	15	0
Mill, Dr. L. M. D. ...	1	0	0	British Insulated Cables Ltd. ...	5	5	0
Millar, A. W. ...	0	5	0	Brookes, T. H. ...	0	10	6
Motherwell & Wishaw Corporation ...	4	4	0	Brown, Mrs. J. H. ...	1	0	0
Paisley Corporation ...	5	5	0	Burnley Corporation ...	2	2	0
Renfrew Corporation ...	2	2	0	Burnley Gas Dept. ...	1	1	0
Renfrew County Council ...	10	10	0	Bury Corporation ...	4	4	0
Ritchie, G. B. ...	0	10	6	Buxton Corporation ...	2	2	0
Rothsay Corporation ...	2	2	0	Chadderton U.D.C. ...	3	3	0
Royal Sanitary Assn. of Scotland ...	1	1	0	Chester Corporation ...	3	3	0
Scott Park, Dr. and Mrs. S. D. ...	0	10	6	Chester United Gas Co. ...	2	2	0
Scottish Junior Gas Assn. ...	1	1	0	Chorley Corporation ...	1	1	0
Smith, Mrs. J. ...	0	10	6	Chorlton, Miss M. D. ...	0	10	6
Smith, Wm. B. ...	2	2	0	*Clayton, R. H. ...	5	0	0
*Stead, G. W. ...	10	0	0	Clitheroe Corporation ...	2	2	0

Division 2—Northern Ireland

Jackson, C. L. ...	0	10	6
Young, Miss A. E. ...	0	10	0

Division 3—North-West

Accrington High School for Girls, Scientific Society ...	0	10	6
Affleck & Brown Ltd. ...	2	2	0

Duguid, Mr. and Mrs. S. ...	1	1	0
Failsworth U.D.C. ...	2	2	0
Farnworth Corporation ...	3	3	0
FitzGerald, Miss M. ...	0	10	6
Forrester, R. E. ...	0	15	0
Gamlen, R. E. ...	1	1	0
*Gandy, Charles ...	5	0	0
Ganter, D. ...	0	10	6

	£	s.	d.		£	s.	d.
Gaskell, J.	0	10	6	Pontefract Bros.	2	2	0
Glossop Corporation	1	1	0	Priestley, I.	0	10	6
Gregory, Dr. A.	0	10	0	Prest, J.	1	0	0
Gregory, J.	1	0	0	Preston Corporation	10	10	0
Hancock, A.	3	0	0	Preston Gas Co.	1	1	0
Hardy, G. & Co.	2	2	0	Radcliffe Corporation	2	2	0
Hartley, Geo. E.	0	10	0	Refuge Assurance Co.	10	10	0
Hay, Dr. J.	1	1	0	Richards, Mrs. E.	0	5	0
Haycroft, Mrs. E.	0	10	6	Robinson, Ald. J.	1	0	0
Hayhurst, Mr. H. and Mrs. L.	1	1	0	Rochdale Corporation	5	5	0
Herbert, J. L.	0	10	6	Royton U.D.C.	1	1	0
Herford, Miss A. C.	0	10	6	St. Helen's Corporation	10	10	0
Heywood Corporation Gas Dept.	1	1	0	Sale Corporation	3	3	0
Holt, W. T.	0	10	6	Salford Corporation	2	2	0
Horwich U.D.C.	2	2	0	Salford Electricity Committee	10	10	0
Howell, W. F.	0	10	0	Salford Gas Committee	10	10	0
Hyde Corporation	3	3	0	Sandbach, Miss E. A.	0	10	6
Hyde, F.	1	1	0	Shaw, R.	0	5	0
Irlam U.D.C.	2	2	0	Simon, Sir Ernest	2	2	0
Johnson, W. A.	0	10	6	Simon-Carves Ltd.	5	5	0
Johnston, S.	0	5	0	*Smith, Herbert	5	5	0
Jones, P. G.	0	10	6	Smith, Miss J. E. M.	0	10	6
Kay, Miss D.	0	5	0	Stockport Gas Committee ...	2	2	0
Keddie, Dr. J. T. Chalmers ...	0	10	0	Southport Corporation	1	1	0
Lancashire & Dist. Coke Assn.	10	10	0	Stretford Corporation	4	4	0
Lancaster Corporation	2	2	0	Stretford & Dist. Gas Board	5	5	0
Langford, A. S.	0	10	6	Swale, W. E.	0	10	6
Lapage, Dr. C. P.	0	10	6	Sweetnam, W. P.	0	10	6
Lee, Sir Kenneth	1	1	0	Swinton & Pendlebury Corporation	2	2	0
Lee, Miss M.	1	1	0	Taylor, H. F.	0	12	6
Littleborough Gas Co.	1	1	0	Taylor, Miss M. R.	0	10	0
Liverpool Gas Co.	10	10	0	Taylor, P. W.	0	10	6
Macclesfield Corporation ...	3	3	0	Tootal, Broadhurst, Lee & Co. Ltd.	5	5	0
MacWilliam, Dr. H. H.	0	10	6	Unsworth, J.	0	10	6
Manchester Corporation	26	5	0	Urmston U.D.C.	4	4	0
Manchester Electricity Dept.	10	10	0	Warrington Corporation	5	5	0
Manchester Gas Dept.	5	5	0	Wells, Dr. N. H.	0	5	0
Marple U.D.C.	2	2	0	West's Gas Improvement Co. Ltd.	10	10	0
Marple Gas Dept.	1	1	0	Whiston R.D.C.	1	1	0
Mather, L. E.	1	1	0	Widnes Corporation	5	5	0
Matthews, W.	1	0	0	Wigglesworth, Miss E.	1	0	0
McGlynn, E. P.	1	1	0	Winsford Gas Co. Ltd.	2	2	0
McKellan, N.	1	1	0	Wrexham Corporation	5	5	0
Melland, Mrs. W.	1	1	0	Young, J. W.	1	1	0
Middleton Corporation	2	2	0				
Middlewich Gas Light & Coke Co.	2	2	0				
Mitchell, L. A.	1	0	0				
Moore, S. H.	0	10	6				
Morrison, Dr. J.	1	1	0				
Mossley & Saddleworth Gas Co. Ltd.	3	3	0				
Nelson Corporation	3	3	0				
Newton-le-Willows U.D.C. ...	1	1	0				
Oldham Corporation	10	10	0				
Oldham Gas Dept.	5	5	0				
Packer, W.	0	10	6				
Pear, Mrs. C.	0	10	6				
*Polding, W.	0	10	6				

Division 4—North-East

Angus, Col. E. A.	3	3	0
Baker, G. M.	0	10	6
Caller, Dr. S.	0	10	6
Chester-le-Street R.D.C. ...	2	2	0
Darlington Corporation ...	5	5	0
Durham U.D.C.	1	1	0
Easington R.D.C.	5	5	0
*Gandy, Mr. and Mrs. H. ...	1	10	0
Gateshead Corporation	1	1	0
Hartlepool Gas & Water Co.	1	1	0

	£	s.	d.
Hexham Gas Co.	2	2	0
Houghton-le-Spring U.D.C.	3	3	0
Moulsdale Williams, Mrs. E.	0	10	6
Newcastle upon Tyne Corporation	15	15	0
Newcastle & Gateshead Gas Co.	5	0	0
Stanley, Co. Durham, U.D.C.	3	3	0
Stockton-on-Tees Corporation	5	0	0
Sunderland Corporation ...	10	10	0
Whickham U.D.C.	2	2	0
Whitley Bay U.D.C.	1	0	0

Division 5—Yorkshire

Adwick le Street U.D.C. ...	2	2	0
Aireborough U.D.C. ...	1	1	0
Batley Corporation ...	3	3	0
Bingley U.D.C. ...	2	2	0
Bonner, J. R. ...	0	5	0
Bradford Civic Society ...	1	1	0
Bradford Gas Dept. ...	5	5	0
Bray, George & Co. ...	10	10	0
Bridlington Corporation ...	2	2	0
Brighouse Corporation ...	3	3	0
Brown, G. L. ...	2	2	0
Bullwinkle, C. L. S. ...	0	10	6
Castleford U.D.C. ...	2	2	0
Cellan-Jones, G. ...	2	2	0
Clayton, Son & Co. Ltd. ...	2	2	0
Clegg, E. ...	0	10	6
Coke Oven Managers' Assn. ...	10	10	0
Craddock, Mr. and Mrs. H. ...	1	1	0
Doncaster Corporation ...	4	4	0
Elland-cum-Greetland Gas Co. ...	2	2	0
Elwell, Mrs. E. ...	0	10	6
Gallimore, Miss M. ...	0	10	6
Goldstern, W. ...	0	10	6
Goodfellow, J. ...	0	10	6
Graucob, F. Ltd. ...	2	2	0
Halifax Corporation ...	2	2	0
Hebden Royd U.D.C. ...	1	1	0
Holmes, W. C. & Co. Ltd. ...	10	10	0
*Holmes, W. G. ...	2	10	0
Huddersfield Corporation ...	2	2	0
Hull Corporation ...	15	15	0
Jones, G. ...	0	10	6
Leeds Corporation ...	15	15	0
Leeds Electricity Dept. ...	10	10	0
Leeds Gas Dept. ...	25	0	0
Lister, H. & Sons Ltd. ...	2	2	0
Marrian, Miss M. E. ...	0	10	6
Marshall, G. C. ...	0	5	0
Micklethwait, R. G. ...	0	10	0
Morley Corporation ...	3	3	0
Neill, W. C. H. ...	0	10	6
Nicholson, P. B. ...	1	1	0
Osborne, Dr. H. ...	1	1	0
Power Gas Corporation Ltd. ...	5	5	0
Pudsey Corporation ...	1	1	0

	£	s.	d.
Reif, Arnold E.	1	1	0
Rothwell U.D.C.	2	2	0
Scarborough Corporation ...	2	2	0
Scarborough Gas Co. ...	1	1	0
*Severs, J. S.	1	0	0
Sheffield & Dist. Gas Co. ...	10	10	0
Shipley U.D.C.	3	3	0
Slagg, J. H.	0	5	0
Spenborough U.D.C. ...	3	3	0
Spenborough U.D.C. Gas Dept.	2	2	0
*Turner, T. Henry	0	10	6
Wakefield Corporation ...	5	5	0
Warwick, H.	0	10	6
Webb, R. N.	1	1	0
West Riding Group of Gas Companies	10	10	0
Wood, F. T.	0	10	6
Yeadon & Guiseley Gas Co. ...	2	2	0
York Corporation	5	5	0
Yorkshire Electric Power Co. ...	10	10	0
Yorkshire Gas Coke Assn. ...	25	0	0

Division 6—West Midlands

Adler, Dr. S.	1	1	0
Allday, W. & Co. Ltd. ...	1	1	0
Barrow, H.	0	5	0
Best, J. K.	0	10	6
Bilston Corporation ...	5	5	0
Birmingham Corporation ...	31	10	0
Birmingham Gas Dept. ...	5	5	0
Brierley Hill U.D.C. ...	3	3	0
Brierley Hill & Dist. Gas Co. ...	1	1	0
Burton-upon-Trent Corporation	3	3	0
Cannock District Gas Co. Ltd. ...	3	3	0
Coventry Corporation ...	10	10	0
Harris & Co. Ltd. ...	1	11	6
Hayes, Mrs. A. L. ...	0	10	6
Herbert, A. Ltd. ...	1	1	0
Hutchinson, G. H. ...	0	10	6
Iron Bridge & Dist. Gas Co. Ltd.	2	2	0
Johnson, R.	0	10	6
Jones, C. F.	1	1	0
Kidderminster Corporation ...	4	4	0
Kidsgrove Gaslight Co. ...	3	3	0
Ludlow Union Gas Co. Ltd. ...	2	2	0
Malpas Gas Co. Ltd. ...	1	1	0
Market Drayton Gas Co. ...	2	2	0
Midlands Joint Advisory Council for Smoke Abatement	2	2	0
Newcastle-under-Lyme Corporation	4	4	0
Radiation Ltd.	10	10	0
Redditch Gas Co.	10	10	0
Rowley Regis Corporation ...	2	2	0
Rugeley Gas Co.	2	2	0

	£	s.	d.
Severn Valley Gas Corporation Ltd. ...	10	10	0
Shrewsbury Gas Light Co. ...	10	10	0
Smart, R. Cecil ...	0	5	0
Smethwick Corporation ...	5	5	0
Solihull Gas Co. ...	1	1	0
Stafford Corporation ...	1	1	0
Stoke-on-Trent Corporation ...	15	15	0
Stoke-on-Trent Gas Dept. ...	5	5	0
Stone Gas Light & Coke Co. Ltd. ...	2	2	0
Stourbridge Gas Dept. ...	1	1	0
Stourport Gas Co. ...	3	3	0
Tamworth Gas Light & Coke Co. ...	3	3	0
Treize, W. E. ...	1	1	0
Wall, John M. Ltd. ...	1	1	0
Walsall Corporation ...	10	10	0
Wednesbury Corporation ...	2	2	0
Wellington (Salop) Gas Co. ...	10	10	0
Wem Gas Light & Coke Co. Ltd. ...	1	1	0
West Bromwich Corporation ...	2	2	0
Whitchurch (Salop) Gas Co. Ltd. ...	2	2	0
Wilkins, Dr. E. H. ...	0	10	6
Wolverhampton Corporation ...	10	10	0
Wolverhampton Gas Co. ...	5	5	0
Wolverhampton Electricity Dept. ...	1	1	0

Division 7—East Midlands

Ambler, T. & Sons ...	1	1	0
Ashwell & Nesbit Ltd. ...	2	2	0
Bakelite Ltd. ...	2	2	0
Beeston & Stapleford U.D.C. ...	3	3	0
Boston Corporation ...	2	2	0
Cambridge Corporation ...	1	1	0
Cambridge University & Town Gas Light Co. ...	21	0	0
Charlesworth, Mrs. ...	0	5	0
Chesterfield Corporation ...	4	4	0
Clarke, J. A. ...	1	0	0
Clarke, Dr. R. T. V. ...	0	10	6
Coote & Warren, Ltd. ...	1	1	0
Corrin, H. R. ...	0	10	6
Dearden, J. ...	0	10	6
Derby Corporation ...	1	1	0
Fry, Miss R. ...	1	1	0
Gt. Grimsby Gas Co. ...	1	1	0
Grimsby Corporation ...	5	5	0
Gt. Yarmouth Gas Co. ...	4	4	0
Gurney, J. ...	5	5	0
Hall, Mrs. M. C. ...	1	1	0
Heanor U.D.C. ...	2	2	0
Ipswich Gas Light Co. ...	15	15	0
Kirkby-in-Ashfield U.D.C. ...	1	1	0
Leicester Corporation ...	26	5	0
Leicester Gas Dept. ...	3	3	0

	£	s.	d.
Lincoln Corporation ...	5	5	0
Long Eaton Gas Co. ...	10	10	0
Lowestoft Water & Gas Co. ...	2	2	0
Mansfield Corporation ...	3	3	0
Melton Mowbray Gas Light & Coke Co. ...	3	3	0
Messenger, Cllr. Mrs. R., J.P. ...	0	10	6
McHugh, F. G. ...	0	5	0
Nottingham Corporation ...	15	15	0
Pearson, Dr. S. Vere ...	0	10	0
Ross Gas Co. Ltd. ...	2	2	0
Swadlincote District U.D.C. ...	2	2	0
Uppingham Gas Light & Coke Co. Ltd. ...	1	1	0
Wright, J. ...	1	0	0

Division 8—South-West

Abercarn U.D.C. ...	1	1	0
Bath Corporation ...	6	6	0
Bradshaw, Miss G. ...	0	5	0
Bristol Corporation ...	5	5	0
Bristol Gas Co. ...	5	5	0
Bromyard Gas Co. Ltd. ...	1	1	0
Brynmaur & Blaina Gas Co. ...	1	1	0
Caldicot & Dist. Gas Light & Coke Co. Ltd. ...	2	2	0
Campbell, A. F. ...	1	1	0
Cardiff Corporation ...	10	10	0
Cardiff Gas Light & Coke Co. ...	13	13	0
Cheltenham Corporation ...	4	4	0
Cheltenham & District Gas Co. ...	5	5	0
Chepstow Gas Co. ...	2	2	0
Clevedon & Yatton Gas Co. ...	1	1	0
Coulthurst, Mrs. A. ...	0	10	6
Dixon, Thomas ...	0	10	6
Ebbw Vale U.D.C. ...	3	3	0
Exeter Gas Light & Coke Co. ...	2	2	0
Fry, Miss A. ...	0	10	6
Gas Consolidation Ltd. ...	10	10	0
Gloucester Gas Light Co. ...	5	5	0
Hereford Corporation ...	2	2	0
Leominster Gas & Coke Co. ...	2	2	0
McDougall, A. ...	2	2	0
Monmouth Gas & Water Works Co. Ltd. ...	2	2	0
Monmouthshire & South Wales Coal Owners' Assn. ...	50	0	0
Morgan, D. & Sons ...	2	2	0
Newport Corporation ...	5	5	0
Newport (Mon.) Gas Co. ...	10	10	0
Rogers, P. ...	2	2	0
*Sanger, Mrs. A. D. ...	1	0	0
Seale, Mrs. I. L. ...	0	10	6
Shaftesbury, Lady ...	0	10	0
Silburn, Mrs. E. ...	0	10	6
Stroud Gas Light & Coke Co. ...	3	3	0
Swindon Corporation ...	4	4	0
Swindon United Gas Co. ...	5	5	0

	£	s.	d.
Tredegar U.D.C.	2	2	0
Wales & Monmouthshire Assn. of Gas Engineers & Managers	1	1	0
Welshpool Gas Co. Ltd. ...	1	1	0
Weston-super-Mare Corpora- tion	2	2	0
Weston-super-Mare & Dist. Gas Co.	1	1	0

Division 9—South-East

Acton Corporation	2	2	0
Acworth, A. W.	0	10	6
Acworth, Miss E. A.	1	1	0
Acworth, Miss W. B.	2	2	0
Adam, W. W.	1	1	0
Alston, Dr. J. M.	1	1	0
Andover Lighting & Power Co.	2	2	0
Ascot District Gas & Elec- tricity Co.	2	2	0
Ascot Gas Water Heaters Ltd.	10	10	0
Ashford, D. J.	0	15	0
Associated Gas & Water Undertakings Ltd.	10	10	0
Atkinson, Mrs. M.	1	0	0
Averill, C. R. Ltd.	1	1	0
Banbury Gas Light & Coke Ltd.	1	1	0
Barber, S. S.	0	10	6
Barking Corporation	1	1	0
Bastian & Allen Ltd.	2	2	0
Baxter, W. L.	1	1	0
Beard, J. R.	1	1	0
Beit, Sir Alfred	1	1	0
Bennett, M. J.	1	0	0
Berry, Dr. J. A.	1	1	0
Bethnal Green Corporation ...	1	1	0
Binderman, Mrs. A.	0	5	0
Blacker, E.	0	10	6
Bognor Gas & Electricity Co.	1	1	0
Bonstow, T. L.	0	10	0
Bossom, A., M.P.	2	2	0
Bournemouth Corporation ...	2	2	0
Bournemouth Gas & Water Co.	2	2	0
Braidwood, G. L.	0	10	6
Brighton Corporation	10	10	0
Brighton, Hove & Worthing Gas Co.	5	5	0
British Electrical & Allied Manufacturers' Assn.	10	10	0
British Electrical Develop- ment Assn.	100	0	0
British Gas Federation	262	10	0
British Medical Association ...	10	10	0
Broadstairs Gas Co.	1	1	0
Buzzacott, J. O.	2	2	0
Cable Makers' Association ...	10	10	0

	£	s.	d.
Camberwell Corporation ...	10	10	0
Capper-Johnson, Dr. L. ...	0	10	6
*Chantler, P.	2	0	0
Charrington, Gardner, Locket & Co. Ltd.	1	1	0
Chertsey Gas Consumers Co. Ltd.	2	2	0
Chingford Corporation	3	3	0
Chislehurst & Sidcup U.D.C.	4	4	0
Chubb, Sir Lawrence	2	2	0
Clarke, D. K.	0	10	6
Clinch, H. G.	0	10	6
Coal Utilization Joint Council	10	10	0
Commercial Gas Co.	3	3	0
Crowe, Cllr. W. H.	2	2	0
Croydon Gas Co.	10	10	0
Darwen, J.	1	1	0
Deal & Walmer Gas Co. ...	1	1	0
Deptford Corporation	2	2	0
Dormer, A. E.	0	8	6
Dover Gas Co.	3	3	0
Eastbourne Gas Co.	2	2	0
East Cowes Gas Co.	1	1	0
East Ham Corporation	10	10	0
East Kent Gas Co. Ltd. ...	1	1	0
Edmonton Corporation	2	2	0
Edwards, Mrs. E. E.	0	10	6
Electrical Assn. for Women	10	10	0
*Elsworthy, J. G.	1	11	6
Farnborough U.D.C.	2	2	0
Finchley Corporation	4	4	0
Finsbury Corporation	2	2	0
Folkestone Gas & Coke Co.	2	2	0
*Foss, Mrs. A.	0	10	6
Fox, F.	0	10	0
Fry, Miss M.	1	0	0
Fulham Corporation	12	12	0
*Gandy, Miss R. L.	0	10	6
Gas Light & Coke Co.	52	10	0
General Electric Co. Ltd. ...	10	10	0
George, A. K.	1	1	0
*Gillison, Dr. J. A.	1	1	0
Goodchild, C. R.	0	10	6
Goodchild, J. R.	0	5	0
Goodeve, Sir C. F.	1	1	0
Gower, R. Leveson	0	5	0
Gravesend Corporation	2	2	0
Gravesend & Milton Gas Light Co.	2	2	0
Greenwich Corporation	2	2	0
Greenwood, T. A. S.	0	10	0
Guildford Corporation	5	5	0
Guildford Gas Light & Coke Co.	2	2	0
Gummer, R. H.	1	1	0
Hammersmith Corporation ...	10	10	0
*Hampson, G. B.	0	10	6
Hastings & St. Leonard's Gas Co.	3	3	0
Hayes & Harlington U.D.C.	2	2	0

	£	s.	d.		£	s.	d.
Herne Bay Gas Co. ...	1	1	0	Parkinson, B. R. ...	0	7	6
Hessel Gas Co. ...	2	2	0	Pitman, E. ...	1	1	0
Heston & Isleworth Corporation ...	2	2	0	Pollitzer, E. ...	2	2	0
Hodgkinson, J. (Salford) Ltd. ...	5	5	0	Poplar Corporation ...	1	1	0
Holborn Corporation ...	1	1	0	Portsmouth Corporation ...	2	2	0
Horder, Lord ...	5	5	0	Portsmouth Gas Co. ...	1	1	0
Hornchurch U.D.C. ...	3	3	0	Pratt, A. G. ...	0	15	6
Hornsea Gas Co. ...	3	3	0	Rathbone, P. R. ...	0	10	6
Hyland, A. ...	0	10	6	Reading Corporation ...	10	10	0
Ideal Boilers & Radiators Ltd. ...	5	5	0	Reilly, Professor Sir Charles ...	0	10	6
Institute of Fuel ...	10	10	0	Rheostatic Co. Ltd. ...	1	1	0
Institution of Electrical Engineers ...	36	15	0	Rhondda, Lady ...	0	10	6
Institution of Heating & Ventilating Engineers ...	3	3	0	Richmond Corporation ...	3	3	0
Jast, Mrs. L. S. ...	0	10	6	Roberts, J. M. ...	1	1	0
Keene, C. E. ...	1	0	0	Robinson, Mrs. E. ...	1	1	0
Kemp, F. W. ...	0	10	6	Rochester, Chatham & Gillingham Gas Co. ...	10	10	0
Kensington Corporation ...	1	1	0	Ryan, J. ...	0	10	6
Kirkman, Mrs. ...	1	1	0	Samuel, Viscount & Lady ...	1	1	0
Kisbee, R. H. ...	0	10	6	Sanitary Inspectors' Assn. ...	10	10	0
Lambeth Corporation ...	1	1	0	Sakoshansky, E. ...	0	5	0
Lea Bridge & Dist. Gas Co. ...	10	10	0	Sheppy Gas Co. ...	2	2	0
Lee, Miss D. C. ...	2	2	0	Shore, Lt.-Col. B. C. G. ...	0	10	6
Lee, S/Sgt. ...	0	15	6	Shoreditch Corporation ...	3	3	0
*Lessing, Dr. R. ...	1	1	0	Sigma Instrument Co. Ltd. ...	3	3	0
Lewin, Dr. O. M. S. ...	1	1	0	Sittingbourne District Gas Co. ...	1	1	0
Lewes Gas Co. ...	1	1	0	Slough Corporation ...	3	3	0
Leyton Corporation ...	5	5	0	Slough Gas & Coke Co. ...	10	10	0
Liptak Furnace Arches Ltd. ...	2	2	0	Smith, Dr. E. W. ...	2	2	0
Lister, B. S. ...	1	0	0	Smith & Wellstood Ltd. ...	1	1	0
London & Counties Coke Assn. ...	52	10	0	Solid Smokeless Fuels Assn. ...	10	10	0
London, Corporation of ...	26	5	0	Southall Corporation ...	1	1	0
London Electricity Supply Assn. ...	10	10	0	Southampton Corporation ...	1	1	0
London Power Co. ...	2	2	0	Southampton Gaslight & Coke Co. ...	5	5	0
Low Temperature Carbonisation Ltd. ...	50	0	0	South Eastern Gas Corporation ...	10	10	0
Luton Corporation ...	10	10	0	Southend-on-Sea Corporation ...	10	10	0
Luton Gas Co. ...	3	3	0	South Suburban Gas Co. ...	10	10	0
Maidstone Gas Co. ...	3	3	0	Southwark Corporation ...	2	2	0
Malden & Coombe Corporation ...	1	1	0	Stepney Corporation ...	4	4	0
Margolis, A. E. ...	0	10	6	Sturtevant Engineering Co. Ltd. ...	2	2	0
Markham, Major S. F. ...	0	10	6	Surbiton Corporation ...	1	1	0
Matthews, Mrs. M. ...	0	10	6	Taylor, Professor E. G. R. ...	1	0	0
McGhie, A. T. S. ...	0	10	6	Tiranti, Alex ...	0	5	0
*McLachlan, T. ...	0	10	6	Tottenham Corporation ...	10	10	0
Merton & Morden U.D.C. ...	4	4	0	Tottenham & District Gas Co. ...	10	10	0
Mid-Kent Gaslight & Coke Co. ...	1	1	0	Trier, F. Newton ...	2	2	0
Mitchell, Dr. C. A. ...	0	10	6	Troup, Lady W. ...	0	10	0
*Munro, Mrs. M. A. ...	0	10	6	Tunbridge Wells Gas Co. ...	3	3	0
North Middlesex Gas Co. ...	10	10	0	Twickenham Corporation ...	5	5	0
Orr, Dr. T. ...	2	2	0	Uxbridge U.D.C. ...	2	2	0
Oxford Corporation ...	10	10	0	Uxbridge, Maidenhead, Wycombe & Dist. Gas Co. ...	10	10	0
Oxford & District Gas Co. ...	2	2	0	Vaughan-Cowell, Lt.-Col. A. ...	1	1	0
Paddington Corporation ...	5	5	0	Des Voeux, Mrs. H. A. ...	5	5	0
				*Wadham, Miss D. ...	1	0	0

	£	s.	d.		£	s.	d.
Walters, P. F.	0	10	6	Windsor Royal Gaslight Co.	2	2	0
Wandsworth Corporation ...	5	5	0	Women's Gas Council ...	10	10	0
Wandsworth & District Gas				Woodall-Duckham Vertical			
Co.	10	10	0	Retort Ltd.	10	10	0
Ward, Dr. F. A. B.	2	2	0	Wood Green Corporation ...	1	1	0
Watford Corporation	2	2	0	Overseas Subscriptions			
Welwyn Garden City				Cadbury, G. W.	1	1	0
Women's Co-op Guild	0	5	0	Jaffray, F. A.	2	0	0
Wembley Corporation	10	10	0	Vereeniging Town Council			
West Ham Corporation	1	1	0	(S.A.)	1	1	0
Westminster City Council ...	5	5	0				
White, Dr. H. D. J.	0	10	6	Subscriptions and donations			
Whitstable Gas & Coke Co. Ltd.	1	1	0	under 5/-	0	19	6
Wicksteed, J. H.	0	10	0				
Willesden Corporation	10	10	0				
Wimbledon Corporation	4	4	0	TOTAL	£2,713	4	6

Information about the Society

The forerunners of the Society were the Coal Smoke Abatement Society, established in London in 1899, and the Smoke Abatement League of Great Britain (1909), which was concerned mainly with the Provinces. The two bodies amalgamated in 1929 to form the present Society. In 1945 its growth and increasing influence made necessary a new constitution to which reference should be made for further information about membership, officers, Executive Council and Committees, etc.

Divisions

For electoral purposes and, where it is desired, area organisation, the Society is now composed of the following geographical Divisions: (1) Scotland, (2) Northern Ireland, (3) North West, (4) North East, (5) Yorkshire, (6) West Midlands, (7) East Midlands, (8) South West, (9) South East. (See Constitution for the counties in each Division).

Membership

The Society is wholly dependent on the contributions of its members for the maintenance and growth of its work, and invites the support of all who sympathise with and wish to promote its objects. These, to quote from the Constitution, are "to secure throughout the United Kingdom the maximum of natural light and air free from every form of pollution, and particularly that arising from the combustion of fuel."

There are four classes of membership—for individuals, local authorities, institutions and corporate bodies such as firms and public undertakings. Particulars of membership are given on the next page.

Individual members and the representatives of other members have rights of nomination and voting in elections for Officers and Council. They receive, free of charge, the Society's quarterly journal *SMOKELESS AIR*, and other publications. They are entitled to receive assistance and information on problems relating to smoke abatement. In addition to receiving notices of meetings and conferences organised nationally, they are entitled to participate in any activities organised by or in their own Division.

Subscriptions

INDIVIDUAL MEMBERS—Not less than 10s. 6d. a year.

ASSOCIATES—Subscribers of less than 10s. 6d. are Associates, who receive some literature and notices, but not all the privileges of membership.

LOCAL AUTHORITY MEMBERS—Not less than the following amounts, according to populations :

Less than 25,000	...	...	...	2 guineas
25,000 to 50,000	...	...	...	3 „
50,000 to 75,000	...	...	...	4 „
75,000 to 100,000	...	...	...	5 „
100,000 to 250,000	...	...	...	10 „
250,000 to 500,000	...	...	...	15 „
Over 500,000	...	...	...	25 „

INSTITUTION MEMBERS (which includes Societies, Associations and Groups)—Not less than 10 guineas.

CORPORATE MEMBERS (which includes Companies, Firms, and Departments of Local Authorities)—Not less than 10 guineas.

SPECIAL CASES—The Executive Council may consider applications for membership on special terms as to subscriptions and otherwise. This rule is intended to apply in particular to local and other small voluntary associations wishing to become Institution Members.

DONATIONS—The Society will be pleased to receive single or annual donations for any amounts from non-members.

PUBLICATIONS—Annual subscriptions may be made for “Smokeless Air” and for other publications as issued.

PAYMENT OF SUBSCRIPTIONS—The first subscription should be forwarded with application for membership. This may be sent at any time, and the subscription remains in force until the first day of the corresponding month of the following year. It is mutually advantageous if subscriptions are made by Banker's Order.

Representatives

Local Authority, Institution and Corporate Members are entitled to appoint Representatives to exercise on their behalf the rights of members as regards nomination for office, voting, and receipt of publications, etc. Institution and Corporate Members may appoint two representatives each, and Local Authority Members a number according to population, as follows :

Less than 100,000	...	...	...	...	2
100,000 to 250,000	...	...	...	...	3
250,000 to 500,000	...	...	...	...	4
500,000 and over	...	...	...	...	5

The names and address of Representatives should be forwarded on making application for membership, so that they may be entered in the Voting Registers.

Services to Members

Information and Advice

Members may obtain from the Society, at the discretion of the Executive Council, and free of charge, advice, assistance and information on questions relating to atmospheric pollution and its prevention.

Library

The Society possesses an extensive collection of books, reports, and pamphlets, British and foreign (largely U.S.A.) on smoke abatement and related subjects. Copies may be borrowed by members or consulted at Chandos House.

Lectures

The Society will be pleased to help members and others to arrange lectures and talks of all kinds in any part of the country on smoke prevention and related subjects. It is hoped very shortly to draw up a new Panel of Lecturers, similar to that in use before the war. This will indicate the area, subjects, types of meeting, etc., with which each lecturer is concerned. Members qualified and prepared to have their names included in the Panel are invited to write to the General Secretary.

Lantern Slides and Films

The lantern slide collection is to be revised and extended and slides will be available on loan at a charge of 1d. each per lecture, plus postages. Slides for inclusion in this collection, especially of modern equipment, will be received with thanks. **Films**—The Society does not at present possess films of its own, but will be glad to suggest suitable films that may be available from other sources.

Exhibits

The pre-war exhibit service is being resumed and improved. Inquiries about the loan of exhibits, or the Society's participation in exhibitions should give the fullest details possible of what is required. In view of transport and packing difficulties material can be loaned more readily if it can be collected from and returned to Chandos House by car or van.

Posters

The following posters are available: (1) Set of pictorial and letterpress posters designed for use on ex-E.M.B. frames, but can be used singly. Price 2/6 per set. (2) New prize-winning photo-colour poster, 30 in. x 20 in. Price 6d. each. (3) New pictorial chart primarily for school use, "These are the Things that Smoke Does," 30 in. x 20 in. Price 6d. (Other charts to follow in due course). Reduced prices for quantities. Posters may be supplied free of charge in appropriate cases.

Literature

Inquiries are invited on the supply of publications, give-away leaflets, etc., for special purposes.

Photographs

A collection of photographs of smoke abatement subjects, suitable for reproduction and exhibition purposes, is being built up, and prints will be forwarded on request. Subjects required should be specified. Reproduction fees, where chargeable, at standard rates. New photographs of high pictorial quality are desired, by gift, copyright purchase, or other arrangement.

The Covenant Subscription Scheme

Particulars of the scheme that enables you to increase, without extra cost, the benefit of your subscription to the Society. We invite you to consider it.

For the purpose of the scheme the Society is recognised as a "charity" by the Commissioners of Inland Revenue, and it may claim for its own use the amount of the income tax that has been paid on the subscriptions it receives, provided that the subscriber has signed an agreement to subscribe a stated sum annually for a period of at least seven years.

Thus, if a member agrees to subscribe £5 a year, this amount is considered as what remains after a larger gross sum has been taxed, and the Society is able to claim the difference. With income tax at 9/- in the £ the gross amount is £9 1s. 10d., and the Society thus receives £4 1s. 10d. from the authorities. The benefit to the Society is thus nearly doubled at no further cost to the subscriber. A lower rate of tax would reduce the amount so recovered, but an increased benefit to the Society remains.

The only obligation into which the subscriber enters in order to assist the Society in this way is to covenant to continue the subscription for a minimum period of seven years, or during his life, whichever period should be shorter.

After the covenant has been signed the subscriber is not required to take any further action other than duly forwarding his annual subscription (or more conveniently paying it by Banker's Order) and signing an Inland Revenue certificate

which will be sent to him each year by the Society, to the effect that the subscription has in fact been paid and has been drawn from his "general fund of taxed income." The certificate will show the gross amount from which tax has been deducted, and the subscriber will be entitled to show such gross amount as a "charge" in his return of income for tax purposes, an advantage some will appreciate.

A specimen form of covenant is given below. Such a document may be prepared on plain paper by the subscriber, and, after being signed and witnessed, sent to the Society. If preferred, the Society will prepare and forward a document on receipt of the particulars required (*i.e.*, name in full, address in full, description or occupation, and the amount to be paid annually to the Society). The required stamping of the document will be attended to by the Society.

It will be noted that the gross amount concerned varies according to the rate of income tax, but that the sum that the subscriber pays direct to the Society does not alter. It is this sum that is stated in the covenant.

The specimen is in the form required by individuals, but corporate bodies will no doubt be able to modify it as may be required.

SPECIMEN OF COVENANT

I (name).....of.....
 (address).....(description or occupation).....
HEREBY COVENANT with the National Smoke Abatement Society, of Chandos House, Buckingham Gate, in the City of Westminster, that for a period of seven years from the first day of....., 194....., or during my life which ever period shall be shorter, I will pay annually to the said Society such a sum as will after the deduction of income tax at the rate for the time being in force amount to the sum of.....
 (amount in words), such sum to be paid from my general fund of taxed income.

IN WITNESS whereof I have hereunto set my hand and seal this.....
 day of.....194.....

Signed, sealed and delivered by the said	}	(Signature)
in the presence of		
Signature (witness)		
Address		
Occupation		

Publications—continued

Smokeless Air. The Society's quarterly journal. The only magazine in the world devoted to the problems of atmospheric pollution. Gratis to members or 2/6 per annum, post free.

The Law of Smoke Nuisances. By W. R. Hornby Steer, M.A., LL.B., Recorder of South Molton, Standing Counsel to the Society. This book, based on an earlier work by Randolph A. Glen and revised and extended in accordance with the Public Health Acts of 1936, is likely to be accepted as a standard work on the subject. In addition to the explanatory chapters, it contains tables of statutes and cases and the relevant sections from the two Acts and the Local Government Act, 1933. 8vo., 65 pages, 1/- paper-backed; 2/6 cloth bound.

Science Museum Exhibition Handbook. This is not only a detailed guide to the Exhibition, but, containing a series of twelve authoritative articles on the main aspects of the problems, is a permanent and useful reference book. 80 pages, medium 8vo. Price 6d.

Fumifugium : or the Smoke of London Dissipated. By John Evelyn. This rare and fascinating book, first published in 1661 by command of Charles II, has been republished by the Society with an introduction by Rose Macaulay. In spite of its age this indictment of the smoke evil by the author of the famous Diaries, remains true, witty and penetrating. Illustrated with original wood engravings and a portrait of Evelyn. Paper covers, 6d. Cloth bound, 1/6.

The State of the Atmosphere. A valuable and informative paper by the late Sir Frank Baines, F.R.I.B.A. With a section on the effects of smoke upon building stone. Royal 8vo, pp. 36. Price 6d.

Smoke and Aviation. Full report of a special conference on this subject. Four papers and discussions. Illustrated. 40 pages 8vo. Price 6d.

Britain's Burning Shame. This pamphlet has been described in a review as "a masterpiece of modern popular propaganda." It puts the smoke problem in its simplest terms, especially as it affects the home, and is profusely illustrated. Single copies 2d. 12/6 per 100.

Conference Proceedings. Copies are available at 1/- each of the full reports, containing papers and discussion of conferences held in 1932, 1934, 1936 (2/-), 1937, 1938 and 1943.

Smoke Emission on Chart. A chart of tinted diagrams of different intensities of smoke, for making observations of chimney emissions. The grades shown are pale grey, grey, black and dense black. 3d. each, 2/6 per dozen.

Proceedings of the London Conference, 1943. A complete report of the conference on "Smoke Prevention in Relation to Plans for Post-War Reconstruction," held in London on 5th November, 1943. 24 pages 1/-.

Smoke Abatement in Greater London. Report of a conference of London and Great London Local Authorities, 1938. Including a paper read by Dr. J. S. Owens, A.M.Inst.C.E., M.I.Mech.E., on "The present position and trends of Atmospheric Pollution in Greater London." 22 pages, 6d.



All post free.

Reduced prices for quantities.

(See inside front cover for other publications).

C 32

**NATIONAL SMOKE
ABATEMENT SOCIETY** 1948

**OFFICERS * COUNCIL * DIVISIONS * LOCAL
AUTHORITY MEMBERS * INFORMATION**

**SERVICES * 18th ANNUAL REPORT (1947)
SUBSCRIPTIONS * ACCOUNTS * PUBLICATIONS**

INVITATION

If you are not yet a member of the Society, and if there is no membership form enclosed with this Report, please write for one and for specimen copies of SMOKELESS AIR and other publications.

Individual annual subscriptions are from 5/-, and there are special membership rates for Local Authorities, Corporate Bodies, etc. (see page 20).

The Society's most urgent need is for more members. We shall be grateful for your support.

National Smoke Abatement Society

1948

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Central Offices

CHANDOS HOUSE, BUCKINGHAM GATE, WESTMINSTER, S.W.1

ABBeY 1359

National Smoke Abatement Society

President : SIR GEORGE ELLISTON, M.C., M.A., J.P., D.L.

Past President : WILL MELLAND, M.A., J.P.

Chairman of the Council : CHARLES GANDY, B.A.

Deputy Chairman : JOHN W. BEAUMONT, F.R.SAN.I., F.S.I.A.

Hon. Treasurer : SIR ERNEST SMITH, C.B.E., D.SC., F.I.C., M.I.CHEM.E., M.I.GAS.E.

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General Secretary and Editor : ARNOLD MARSH, M.SC.TECH., M.INST.F.

Vice-Presidents :

- | | |
|--|---|
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Elected Members of the Council

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Allan W. Ritchie, M.B.E., F.R.SAN.I.
Bailie Violet Roberton, C.B.E., LL.D., J.P.

North Western Division

- J. L. Burn, M.D., B.S., B.HY., D.P.H.
S. N. Duguid, J.P., B.SC.TECH., F.INST.F., F.R.SAN.I.
W. M. Frazer, O.B.E., M.D., M.SC., D.P.H.
Charles Gandy, B.A.
W. L. Mather, M.C., M.A.
C. Metcalfe Brown, M.D., D.P.H.
Councillor Professor F. E. Tylecote, M.D.

North Eastern Division

- Alderman John Chapman
Alderman P. S. Hancock, O.B.E.

Yorkshire Division

- J. W. Beaumont, F.R.SAN.I., F.S.I.A.
James Goodfellow, M.R.SAN.I., A.M.I.S.E.
J. Johnstone Jervis, M.D., D.P.H.
James Law, M.R.SAN.I., M.S.I.A.

West Midlands Division

- G. W. Farquharson
W. R. Martine, M.B.E., T.D., M.D., D.P.H.
C. A. Stansbury, M.R.SAN.I., M.S.I.A.

East Midlands Division

- Councillor A. Mead
A. Wade, F.R.SAN.I.

South Western Division

- G. W. Dhenin
F. R. Jefford, F.R.SAN.I., F.S.I.A.
F. J. Redstone, F.R.SAN.I., F.S.I.A.

South Eastern Division

- R. A. Baskett, B.E.M., F.S.I.A.
N. Bastable, M.R.SAN.I., F.S.I.A.
H. G. Clinch, F.R.SAN.I., F.S.I.A.
E. H. Gray, F.S.I.A.
R. Lessing, PH.D., F.R.I.C., F.INST.F., M.I.CHEM.E.
G. Nonhebel, M.I.CHEM.E., F.R.I.C., F.INST.F.
H. L. Snowden, M.S.I.A.
L. A. Stroud, D.P.A., F.R.SAN.I.
S. Swift, M.B.E.
W. Tillcock

Local Authority Members

as at 28th February, 1948

Division 1. Scotland

Aberdeen	Edinburgh	Irvine	Motherwell and
Airdrie	Falkirk	Johnstone	Wishaw
Ardrossan	Glasgow	Kilmarnock	Paisley
Ayr	Greenock	Kilsyth	Perth
Clydebank	Hamilton	Kirkaldy	Port Glasgow
Coatbridge	Hawick	Kirkintilloch	Renfrew
Dumbarton	Inverness	Lanarkshire C.C.	Renfrewshire
Dunbarton C.C.			Rothsay
Dundee			Rutherglen

Division 3. North-West

Atherton	Darwen	Liverpool	St. Helens
Barrow-in-Furness	Denton	Macclesfield	Sale
Blackburn	Droylsden	Manchester	Salford
Blackpool	Eccles	Marple	Stalybridge
Bolton	Failsworth	Middleton	Stockport
Bootle	Farnworth	Nantwich	Stretford
Burnley	Glossop	Nelson	Swinton and
Bury	Hale	Newton-le-Willows	Pendlebury
Buxton	Horwich	Northwich	Urmston
Carlisle	Huyton-with-Roby	Oldham	Wallasey
Chadderton	Hyde	Ormskirk	Warrington
Cheadle & Gatley	Irlam	Preston	Widnes
Chester	Lancaster	Radcliffe	Wigan
Clitheroe	Lancashire C.C.	Rhyl	Wilmslow
Crompton	Leigh	Rochdale	Workington
Crosby	Littleborough	Royton	Wrexham

Division 4. North-East

Berwick-upon-Tweed	Chester-le-Street U.D.C.	Houghton-le-Spring	South Shields
Billingham	Darlington	Lanchester	Stanley
Blaydon	Easington	Longbenton	Stockton-on-Tees
Brandon and Byshottles	Felling	Newburn	Sunderland
Chester-le-Street R.D.C.	Gateshead	Newcastle-upon-Tyne	Washington
	Hartlepool	Sedgefield	West Hartlepool
	Hetton	Spennymoor	Whickham

Division 5. Yorkshire

Adwick-le-Street	Colne Valley	Hull	Rothwell
Aireborough	Conibrough	Keighley	Sheffield, Rotherham and Dist. Smoke
Batley	Dearne	Leeds	Abatement Committee
Bentley-with-Arksey	Dewsbury	Mexborough	Shipley
Bingley	Doncaster	Mirfield	Stocksbridge
Bradford	Eston	Morley	Wakefield
Bridlington	Halifax	Pontefract	York
Brighouse	Harrogate	Pudsey	
Castleford	Hemsworth	Rawmarsh	
	Huddersfield	Redcar	

Division 6. West Midlands

Bilston	Dudley	Rowley Regis	Stoke-on-Trent
Birmingham	Halesowen	Rugby	Walsall
Brierley Hill	Kidderminster	Sedgley	Wednesbury
Burton-upon-Trent	Meriden	Shrewsbury	West Bromwich
Cannock	Newcastle-under-Lyme	Smethwick	Willenhall
Coventry	Oldbury	Solihull	Wolverhampton
Darlaston		Staffordshire C.C.	

Division 7. East Midlands

Beeston and Stapleford	Corby	Kirby-in-Ashfield	Rushden
Blackwell	Gainsborough	Leicester	Staveley
Bolsover	Grimsby	Lincoln	Sutton-in-Ashfield
Boston	Heanor	Mansfield	Swadlincote
Chesterfield	Hinckley	Nottingham	Worksop
	King's Lynn	Peterborough	

Division 8. South-West

Abercarn	Cheltenham	Kingswood	Newport (Mon.)
Abertillery	Clevedon	Llwchr	Pontypridd
Bath	Cwmbran	Merthyr Tydfil	Portishead
Blaenavon	Ebbw Vale	Mynyddislwyn	Swindon
Bristol	Gloucester	Neath	Thornbury R.D.C.
Cardiff	Hereford	Neath R.D.C.	Tredegar

Division 9. South-East

Acton	East Ham	Ilford	St. Pancras
Banbury	Edmonton	Kingston-on-Thames	Shoreditch
Barking	Erith	Letchworth	Slough
Barnes	Eton R.D.C.	Lewisham	Southall
Battersea	Farnborough	Leyton	Southend-on-Sea
Bermondsey	Feltham	London, City of	Southwark
Bexley	Finchley	Maidenhead	Stepney
Brighton	Finsbury	Malden and Coombe	Sutton and Cheam
Camberwell	Fulham	Merton and Morden	Uxbridge
Chatham	Gravesend	Oxford	Tottenham
Chelmsford	Guildford	Paddington	Thurrock
Chelsea	Hackney	Reading	Wanstead and Woodford
Chingford	Hammersmith	Richmond	Wembley
Chislehurst and Sidcup	Harrow	St. Albans	Westminster
Crayford	Heston and Isleworth	St. Marylebone	Willesden
Dagenham	Holborn		Wimbledon
Dartford	Hornchurch		Windsor
Dartford R.D.C.			

Local Authority Associates

Accrington, Bethnal Green, Birkenhead, Bournemouth, Cambridge, Carshalton, Chorley, Derby, Durham, Enfield, Gosport, Greenwich, Kensington, Lambeth, Luton, Mitcham, Portsmouth, Reigate, Romford, Scarborough, Southampton, Southport, Stafford, Wandsworth, Watford, West Ham, Weston-super-Mare, Whiston, Whitley Bay, Wood Green,

Scottish Divisional Council

Chairman : Allen W. Ritchie, M.B.E.,
F.R.SAN.I.

Hon Secretary : John Traill, B.L.

Secretary's Office : City Chambers,
Glasgow.

Central 9600

Ext. 220

North West Divisional Council

Chairman : Councillor Professor F. E.
Tylecote, M.D.

Hon. Secretary : H. Moore

Secretary's Office : Public Health Dept.,
Town Hall,
Manchester.

Central 3377

Ext. 339

Yorkshire Divisional Council

Chairman : T. Henry Turner, M.Sc.

Hon. Secretary : James Goodfellow

Secretary's Office : Public Health Dept., 12 Market Buildings,
Vicar Lane, Leeds, 1.

Leeds 30211, *Ext.* 11.

Eighteenth Annual Report

for the Year ended 31st December, 1947

GENERAL REVIEW

In our last report we were able to record that the year 1946 had been of outstanding importance to the smoke abatement movement by reason of the publication of the Simon Committee's report, its general acceptance by the Government, and the passing of two important local Acts of Parliament that brought on to the statute book for the first time the new principles of smoke prevention advocated and developed by the Society. Although steady progress has continued, 1947 brought no comparable highlights and the economic situation has made it difficult in many ways to press for the speedier progress we wish to see.

From a long-distance viewpoint the attention that had to be given by the whole nation to the problem of fuel, particularly during the February fuel crisis, may prove to be of substantial value to smoke abatement. The public, and those in positions of responsibility especially, are more aware than ever before of the key position of coal and its derivatives in the national economy, and understanding is gradually spreading that if we would but use our fuels more efficiently the present production of coal would be ample for all our needs. The movement towards higher efficiency in the use of fuel is not likely to be halted, and much less to be reversed, by the probable easing of the supply situation, but will continue. It is bound to assist smoke prevention both directly, as an incidental consequence of improvement in use, and indirectly as a supporting reason for the adoption of measures advocated primarily for smoke prevention. The general adoption, for example, of our "prior approval" principle would not only do much to eliminate new sources of

smoke, but could at the same time substantially promote fuel savings.

Grit Emission

The mechanization of coal cutting and conveying, now being widely pressed forward in our mines, increases the quantity of mineral impurity in the coal brought to the surface. A large increase in coal cleaning plant is being planned by the National Coal Board, but for the time being much of the coal burned for all purposes contains an abnormally high proportion of mineral matter. The emission of ash and grit into the atmosphere is therefore increased and the situation is made still worse when, because of the lower calorific value of the coal, combustion has to be accelerated by increasing the draught.

There is little doubt that there is a material increase in the number of complaints of "nuisance" due to grit emission, even though it is difficult to obtain quantitative evidence. Possibly, indeed, grit is causing more active annoyance than are nuisances due to smoke itself. We welcome therefore all measures taken to improve the quality of coal and to increase the efficiency and economy of grit arresting appliances, and would especially like to see the latter used more generally in medium and small installations. It is hoped that the Society's "National Survey of the Sources of Pollution" may provide more information on the extent of grit and ash emissions throughout the country.

A particular form of dust nuisance to which attention has been drawn during the year is that from cement works. This is a serious matter in the Thameside districts of north Kent and south Essex, and the Society was rep-

resented at a well-attended conference of local authorities and other bodies held in Dartford in October. Statements made showed clearly how extensive and serious this trouble is in the area, and a representative Investigation Committee was set up, which the Society has offered to assist at any time desired.

New Generating Stations

The public, local authorities, and others have been concerned about the possible effects of the emission of sulphur acid gases and grit from the new electricity generating stations now being erected and planned. The most controversial case was that of the station to replace the existing one at Bankside, on the south side of the Thames, facing the City of London. Opposition was primarily directed against the spoiling of the future prospect of St. Paul's, the question of the pollution of the atmosphere, and its threat to the cathedral being raised subsequently by the critics of the

scheme. The station is to burn oil instead of coal, and it is satisfactory that it has been agreed that flue gas washing plant should be installed.

This however is a concession for a particular case; in general the present intention would appear to be not to install such plant, and anxiety is felt in many quarters and by the Society as to the wisdom of such a policy. A new station, now in course of erection at Carrington, near Manchester, has caused particular concern to the local authorities of the heavily-populated area around it. The Society has co-operated with the authorities, and as a result of a joint conference held in September it has been agreed to begin forthwith to take air pollution observations at a number of points in the vicinity, so that comparisons may be made when the station begins to operate. The Electricity Commission has so far agreed to consider representations for the erection of flue gas washing plant only *after* operations have begun.

THE SOCIETY

Growth Continues

The Brighton Conference in October 1946 gave added impetus to the Society's steady growth. The resolution passed at the conference, in which more local authority support was urged, was followed by an individual invitation to all the larger authorities that were not yet members. The response was exceptionally good, and during the year a further 101 authorities became members. The total local authority membership is now 286, with a further 32 Associates. Although in numbers this is only about one-fifth of the total number of possible local authority members, it is important to note that the population represented is over one-half the total for the whole country.

Other classes of membership have increased only slightly during the year, and substantial improvements cannot be expected until it is possible to devote more money and staff time to preparing

and carrying out the appeals that are necessary. The methods required for such appeals are at present being studied by the Publicity Committee.

The Constitution

The new constitution, adopted in 1945, is in practice proving to be very satisfactory, especially now that certain amendments have been made. These have been announced in the "Official Notices" in *SMOKELESS AIR* and provide for the election of contributors other than individuals as associates, a five guinea membership for corporate bodies as an alternative to that at ten guineas, and the election of Vice Presidents by postal nomination and ballot.

The Council and Committees

During the year the Executive Council met in London (twice), Leeds and Edinburgh. All meetings were well attended. There have also been a number of meetings, eight in all, of the General Purposes, Technical and Publicity Committees. The new

Council elections were held during the summer and the results announced at the Annual General Meeting in Edinburgh on 1st October. The present Council, and also the Officers, Vice-Presidents, and Chairmen of Committees are listed on an earlier page.

Statement on the Fuel Crisis

A Statement of the Society's views on the fuel situation was drawn up and issued on behalf of the Executive Council after the February fuel crisis. It was submitted to appropriate Ministers and Government Departments, the principal political parties, the Press, and others concerned with fuel, and secured some useful publicity.

The Statement emphasized the fact that the crisis could be regarded as one further consequence of the extravagant misuse of coal, and continued: "In present circumstances an increase in coal production is a necessity, but should be regarded only as a temporary and regrettable expedient; scientifically, it is more desirable to employ manpower and materials for a limited period in providing the means to use coal more efficiently, than permanently in producing more coal for further wasteful consumption." It urged the need for a comprehensive National Fuel Policy for "the fullest scientific and efficient preparation and utilization of coal and its derivatives for industry, transport, and in the home." It suggested certain short-term policies, including prior approval, the early implementation of the Simon Committee's recommendations, and the need at once to begin to "ensure that for each purpose for which fuel-energy is needed it shall be used only in the form and by the methods most scientifically and economically preferable for that purpose." Finally, attention was drawn to the serious economic consequences of smoke, "which include a substantial diversion of manpower and materials from the creation of new wealth to unproductive maintenance." The Statement is given in full in *SMOKELESS AIR*, Summer, 1947.

The Edinburgh Conference

The 1947 conference, held in Edinburgh from 1st to 4th October, had the largest attendance of any smoke abatement gathering ever held in this country. There were present 437 members and delegates, making, with speakers and guests, a total of 466. The papers read and discussions have been published in the *Proceedings of the Edinburgh Conference*. The number of papers, and their subject matter, make this one of the most important volumes yet published by the Society. From one point of view there was perhaps rather too much information, some of it fairly technical, to be readily digested at the conference itself, but from another point of view the presentation of so much material of importance is of considerable value in helping the Society to establish more firmly its standing as an organization of influence and responsibility.

The conference was warmly welcomed at a Civic Reception by the Lord and Lady Provosts and the City Bailies and Councillors. For the first time a conference dinner was arranged and proved to be most successful and enjoyable. The final event for about a hundred members was a motor coach tour into the Highlands. Two resolutions only were passed at the conference, as follows:

(1) *Grit and Sulphur Gases Emission.*

That this conference of the National Smoke Abatement Society views with grave concern the menace to health and amenities caused by the emission of sulphur acids and grit from power stations, blast furnaces, steel works and coke ovens, and calls on the Ministry of Fuel and Power, the National Coal Board, and the Central Electricity Board to take immediate steps to abate these nuisances.

(2) *National Survey of Atmospheric Pollution.*

That the Executive Council be requested to take the necessary steps to undertake a nation-wide survey of the sources and incidence of existing

atmospheric pollution, and that local authorities be urged to co-operate with the Society with this object in view.

Survey of the Sources of Pollution

The survey asked for in the second resolution above has been considered in detail by the Technical Committee and it has been decided to send to each local authority in the country a questionnaire in two parts. Part I will be very short and general and should be returnable without difficulty by all authorities. Part II is more detailed and will take longer to complete. It is however hoped that a high proportion of replies will be received as the information that can be secured will be of considerable importance in a number of ways and should, when analysed, provide facts that so far are completely unknown.

New Legislation Proposals

The proposals for new legislation submitted at the Brighton conference have been revised by the Technical Committee and are now in course of submission to Government Departments, local authorities and their associations, employers' organizations, and trade unions, for the purpose of obtaining the opinions of all interests and possibly suggestions for improvement. The revised proposals are available in printed booklet form.

Publications

It is regretted that pressure of other activities has prevented the production of several new publications that are urgently required. Apart from the *Brighton Conference Proceedings*, the *Advance Papers for Edinburgh* and the preparation of the *Proceedings* of that Conference, *SMOKELESS AIR*, and the *New Legislation Proposals*, there has been issued only a "give away" leaflet, *14 Facts about Smoke*. Supplies of this can be sent free of charge, for use at lectures, exhibitions, etc.

Judging by the absence of any adverse comments from members, *SMOKELESS AIR* continues to provide news and articles in a form that is appreciated. The weekly review *Time and Tide* was

good enough recently to write that "The Smoke Abatement Society claims to have established a reputation for talking sense, a contention borne out by *SMOKELESS AIR*, which is readable and attractively produced. It is to be hoped that it will find readers who will bother to support its very sensible aim."

Your Chairman and Hon. Treasurer cannot allow to pass without mention here *Smoke: The Problem of Coal and the Atmosphere* by Arnold Marsh, published in October by Faber and Faber, and generally agreed to be the most interesting, important, and comprehensive survey of our whole subject so far written.

Exhibitions

During the year the Society participated in a smoke abatement section of the stand of the Solid Smokeless Fuels Federation at the Ideal Home Exhibition at Olympia. It loaned exhibits for local authority exhibitions in the following towns: York, Hinckley, Stafford, Merton, Herne Bay, Dartford, Sheerness, Brighouse, Ilford and Edmonton. The Edmonton exhibition was for the promotion of fuel economy, and an entirely new exhibit, linking this with smoke prevention, has been prepared. It is available for loan provided that transport can be arranged.

The Divisions

During the year a new Divisional Council, for Yorkshire, has been formed, and is making good progress in its organization. The other Divisional Councils have been very active and successful, and we have invited their Hon. Secretaries to give brief reports of their work during the year as a supplement to this report.

Sir Lawrence Chubb

It is with the deepest regret that we have to record the death, on February 18th, 1948, of Sir Lawrence Chubb. Until ill-health compelled him to retire last summer Sir Lawrence had been an officer of the Society since its formation in 1929, first as Hon. Advisory Secretary and then as Hon. Treasurer.

Before that he had been Secretary of the senior of our parent bodies, the Coal Smoke Abatement Society, from about 1902. Sir Lawrence had thus been intimately associated with the smoke abatement movement since its earliest and most difficult days and as its first and indeed for many years its only executive officer, he was responsible not only for laying and building up from the foundations, but also for a great deal of the sound policy and propaganda that steadily transformed opposition and apathy into understanding and support.

Sir Lawrence's knowledge and clear understanding of legal matters was often of inestimable value to the Society and the struggle for the Public Health (Smoke Abatement) Act, 1926, was largely directed by him. In later years his many other activities—foot-paths and commons preservation and the national drive for playing fields especially—gave him less time for smoke abatement, but he was always ready to do for the Society everything that was asked of him, and many were the times that his counsels were sought and were always wisely and generously given. His loss means more to the Society than even most of its members will be able to appreciate.

Finances and Development

Your Chairman and Secretary would like to express their pleasure, which they are aware is shared by all who know him, that Sir Ernest Smith has consented to become Honorary Treasurer. Sir Ernest is a very old friend and member of the Society, and it is a privilege to have his more active participation in our work at the present time of important development.

The subscription list and statement of accounts that follow show further satisfactory progress in income, even

though it is as yet far from being enough to make possible the developments, especially in the staffing of the Society at Headquarters, that are urgently needed. The increase in expenditure will also be noted, for not only have the costs of administration—our basic and unavoidable costs—sharply increased in recent years, but the scope of our work, and the activities and services that are expected of us by members and others, have also increased in a way that is both satisfactory and embarrassing. It is satisfactory because it is healthy fruit of progress, and embarrassing because only too often we are unable to do what we wish simply through lack of material resources.

All possible means for overcoming this handicap are being examined and it is confidently believed that when once the desired "lift" in income has been achieved it will make possible an expansion of activity that will readily maintain itself and perhaps lead naturally to still further development.

Our appreciation of the continued support of all our members must be expressed. If we cannot ask them to help us still more generously, we may remind them that in doing all they can to recruit new members they will be assisting us in an equally beneficial way. There must be few who could not, with a little effort, succeed in gaining at least one new subscriber.

Messrs. Abbott and Son, Chartered Accountants, of Manchester, have for many years most kindly acted as Honorary Auditors to the Society, and our thanks and appreciation for this most valued service, to which reference has not been made for some years, must be expressed.

CHARLES GANDY, *Chairman.*

E. W. SMITH, *Hon. Treasurer.*

ARNOLD MARSH, *General Secretary.*

THE SCOTTISH DIVISION

The ever increasing membership of the Scottish Division is sufficient to indicate that our continuous efforts to

direct the attention of local authorities and others to all matters pertaining to Smoke Abatement are having successful

results. Close co-operation has been established with the Local Fuel Efficiency Committee on which the Division has three representatives. Certain iron foundries and makers of domestic heating appliances have shown a spontaneous willingness to assist the Society by providing for their Research experts to address conferences of the Society and by giving serious consideration to improvements in design of their appliances suggested by our members.

The thirty-second session of the classes for stokers, firemen, etc., in boiler house practice, fuel economy and smoke abatement has commenced with the greatest number of enrolments ever recorded, viz.: Advanced Class 59, Ordinary Class 130. The fee per student is the nominal one of 3/6d. and students are recruited from Municipal

Departments and industrial firms in the Glasgow area. Written examinations will be held in February next, the successful candidates receiving a certificate of efficiency recognised by employers; the more brilliant students receive also a book prize. Each year a considerable number of students sit the City and Guilds of London Institute Examination in Boiler House Practice. On a number of occasions the Silver Medal awarded by the Institute has been won by a Glasgow student.

A large local authority who are installing additional plant at a generating station have agreed to give consideration to representations made by the Division for the installation of the latest devices for reducing the emission of smoke from such stations.

JOHN TRAILL, *Hon. Secretary.*

NORTH WEST DIVISION

The year 1947 has been full of interest in the North West and will hold an honoured place in the history of the Division. The Divisional Council have been active and have shown a keen desire to make progress. The Council have met regularly each quarter, the attendance has been consistently good, and throughout, a high level of discussion has been maintained.

Various towns have been visited by the Council and an encouraging feature of this mobility has been the warmth of the welcome which has been extended and the interest in the cause of smoke abatement which has been evinced.

The Divisional Council will strive to weld together the interest of the Local Authorities and other bodies into a general determination to adopt all available measures to bring about a cleaner atmosphere at the earliest possible moment.

So far as industrial smoke is concerned, the Division is fortunate to have Regional Committees within its area; the Manchester and District Committee which revived its activities following

the war has made very effective progress, whilst its counterpart in the Liverpool and West Lancs. Region is following the example.

The good relationship with the Institute of Fuel has continued and the joint meetings held have been singularly successful. Other meetings with the Institute will be welcomed as a particularly useful and informative activity.

An innovation late in the year was the holding of a joint meeting with the Institute of Housing. The subject "Domestic Heating" provided an interesting session.

The Divisional Council regard Joint Meetings with other societies as an essential feature of activity to secure a wider influence in the cause of smoke abatement.

Having regard to all the difficulties which have prevailed, 1947 has been an active year in the North West and we look forward to still greater progress in 1948.

H. MOORE, *Hon. Secretary.*

YORKSHIRE DIVISION

The first Annual General Meeting of the Yorkshire Division to be held under the newly approved Rules and Constitution took place in Leeds on the 27th November, 1947. Officers and Members of the Divisional Council were elected as follows: Mr. T. Henry Turner, M.Sc. (Doncaster), Chairman; Mr. John W. Beaumont (Halifax), Deputy Chairman; Mr. James Goodfellow (Leeds), Honorary Secretary; Mr. J. MacLusky (Halifax), Mr. W. R. T. Skinner (Y. E. Power Co.), Councillor Mrs. K. L. Dell (Pudsey), Alderman W. E. Yorke, J.P. (Sheffield), Alderman F. Harper, J.P. (Rotherham), Mr. A. C. Saword (Hull), Alderman F. Hill (Batley), Councillor W. Spence (Leeds), Mr. W. E. Cooke (Bingley), Mr. T. Wilson (Rothwell), Mr. R. J. Steele (Bradford), and Dr. I. G. Davies (Leeds), members of the Divisional Council.

At the Divisional Council meeting which followed there was considerable discussion on the need for publicity with regard to the extent and effects of

atmospheric pollution in the Yorkshire area. It was resolved that wherever possible the records obtained from atmospheric pollution gauges should be given to the Press. The soot deposit figures of some Yorkshire areas now appear in the newspapers. There are now 49 Atmospheric Pollution Gauges in operation and the figures recorded will be made available to all Council members.

As measurement is a fundamental factor in the recording of progress, it is proposed to hold a Technical Conference of officers responsible for the Yorkshire gauges early in the new year; the aim being to try to secure that all records are taken uniformly in accordance with the recommendations of the Special Committee of the Department of Scientific and Industrial Research.

It is proposed to hold the next meeting of the Yorkshire Division in Sheffield early in the new year.

JAMES GOODFELLOW, *Hon. Secretary.*

Subscriptions and Donations

for the Year ended 30th June, 1947

* Denotes Covenant Subscriber

Division 1—Scotland

	£	s.	d.		£	s.	d.
Airdrie Corporation ...	3	3	0	Birkenhead Corporation ...	2	2	0
Bowies Associated Services Ltd. ...	17	6		Blackburn Corporation ...	10	10	0
Clydebank Corporation ...	3	3	0	Blackpool Corporation ...	10	10	0
Coatbridge Corporation ...	3	3	0	Bolton Corporation ...	10	10	0
Dumbarton Corporation ...	2	2	0	Bootle Corporation ...	5	5	0
Dunbarton County Council ...	4	4	0	Briggs, C. Rawdon ...	1	0	0
Dundee Corporation ...	10	10	0	British Insulated Cables Ltd. ...	5	5	0
Edinburgh Corporation ...	15	15	0	Brookes, T. H. ...	10	6	
Falconer, Mrs. J. ...	10	6		Brown, Mrs. J. H. ...	1	0	0
Falkirk Corporation ...	3	3	0	Bulmer, H. E. ...	10	6	
Forrest, Frew & Co. Ltd. ...	10	6		Burnley Corporation ...	5	5	0
Glasgow Corporation ...	26	5	0	Bury Corporation ...	4	4	0
Glasgow Women's Citizens Association ...	1	1	0	Buxton Corporation ...	2	2	0
Grattidge, H. H. ...	5	5	0	Carlisle Corporation ...	4	4	0
Greenock Corporation ...	3	3	0	Chadderton U.D.C. ...	3	3	0
Hamilton Corporation ...	1	1	0	Chester Corporation ...	3	3	0
Heriot-Watt College ...	10	10	0	Chester United Gas Co. ...	2	2	0
Howden, J. & Co. Ltd. ...	10	10	0	Chorley Corporation ...	1	1	0
Jewell, Mrs. K. I. ...	10	6		Chorlton, Miss M. D. ...	10	6	
Johnstone Corporation ...	2	2	0	Clitheroe Corporation ...	2	2	0
Kirkintilloch Corporation ...	2	2	0	Cooper, Miss I. ...	1	1	0
Lanark County Council ...	15	15	0	Cornbrook Brewery Co. Ltd. ...	10	10	0
Maclaurin, R. ...	10	6		Coulthard, Miss D. ...	10	6	
Macmillan, A. M. ...	1	1	0	Crompton U.D.C. ...	2	2	0
McCallum & Craigie, Ltd. ...	10	6		Darwen Corporation ...	3	3	0
Mill, Dr. L. M. D. ...	1	0	0	Davies, D. E. ...	10	6	
Millar, A. W. ...	5	5	0	Deakin, H. ...	10	6	
Motherwell & Wishaw Corporation ...	4	4	0	Denton U.D.C. ...	2	2	0
Paisley Corporation ...	5	5	0	Droylsden U.D.C. ...	3	3	0
Renfrew Corporation ...	2	2	0	Duguid, Mr. and Mrs. S. N. ...	1	1	0
Renfrew County Council ...	10	10	0	Eccles Corporation ...	3	3	0
Ritchie, G. B. ...	10	6		Edwards, Miss M. ...	5	5	0
Roberton, Bailie Dr. V. ...	1	1	0	Failsworth U.D.C. ...	2	2	0
Rothsay Corporation ...	2	2	0	Farnworth Corporation ...	3	3	0
Royal Sanitary Association of Scotland ...	1	1	0	Fildes, Mrs. A. ...	10	6	
Scott Park, Dr. and Mrs. S. D. ...	10	6		FitzGerald, Miss M. ...	10	6	
Scottish Junior Gas Association ...	1	1	0	Forrester, R. E. ...	15	0	0
Smith, Mrs. J. E. ...	10	6		Gamlen, R. E. ...	1	1	0
Smith, Wm. B. ...	2	2	0	*Gandy, Charles ...	5	0	0

Division 2—Northern Ireland

Jackson, C. L. ...	1	1	0
Young, Miss A. C. ...	10	6	

Division 3—North-West

Accrington High School for Girls ...	10	6		Birkenhead Corporation ...	2	2	0
Affleck & Brown Ltd. ...	2	2	0	Blackburn Corporation ...	10	10	0
*Aitkenhead, Miss M. ...	15	6		Blackpool Corporation ...	10	10	0
Altrincham Gas Co. ...	2	2	0	Bolton Corporation ...	10	10	0
Andrew, W. H. ...	1	0	0	Bootle Corporation ...	5	5	0
Anonymous ...	20	0	0	Briggs, C. Rawdon ...	1	0	0
Ashton Bros. & Co. Ltd. ...	2	2	0	British Insulated Cables Ltd. ...	5	5	0
Ashton Gas Co. ...	3	3	0	Brookes, T. H. ...	10	6	
Ashton-under-Lyme Electricity Dept. ...	2	2	0	Brown, Mrs. J. H. ...	1	0	0
Ashworth, Dr. J. R. ...	10	6		Bulmer, H. E. ...	10	6	
*Barash, Dr. M. ...	10	6		Burnley Corporation ...	5	5	0
Barrow-in-Furness Corporation ...	4	4	0	Bury Corporation ...	4	4	0
Baxendale & Co. Ltd. ...	2	2	0	Buxton Corporation ...	2	2	0
Bayes, Mrs. M. ...	2	2	0	Carlisle Corporation ...	4	4	0
Beard, E. ...	1	1	0	Chadderton U.D.C. ...	3	3	0
Beattie, E. & F. Ltd. ...	1	1	0	Chester Corporation ...	3	3	0
Behrens, A. ...	10	0	0	Chester United Gas Co. ...	2	2	0
Bibby, H. P. ...	2	0	0	Chorley Corporation ...	1	1	0
Bibby, J. & Sons, Ltd. ...	10	10	0	Chorlton, Miss M. D. ...	10	6	
				Clitheroe Corporation ...	2	2	0
				Cooper, Miss I. ...	1	1	0
				Cornbrook Brewery Co. Ltd. ...	10	10	0
				Coulthard, Miss D. ...	10	6	
				Crompton U.D.C. ...	2	2	0
				Darwen Corporation ...	3	3	0
				Davies, D. E. ...	10	6	
				Deakin, H. ...	10	6	
				Denton U.D.C. ...	2	2	0
				Droylsden U.D.C. ...	3	3	0
				Duguid, Mr. and Mrs. S. N. ...	1	1	0
				Eccles Corporation ...	3	3	0
				Edwards, Miss M. ...	5	5	0
				Failsworth U.D.C. ...	2	2	0
				Farnworth Corporation ...	3	3	0
				Fildes, Mrs. A. ...	10	6	
				FitzGerald, Miss M. ...	10	6	
				Forrester, R. E. ...	15	0	0
				Gamlen, R. E. ...	1	1	0
				*Gandy, Charles ...	5	0	0
				Gaskell, J. ...	10	6	
				Gavaghan, Mrs. L. A. ...	10	6	
				Glossop Corporation ...	2	2	0
				Gregory, Dr. A. ...	10	6	
				Griffiths, The Misses ...	10	0	0
				Hancock, A. ...	1	1	0
				Hardy, G. & Co. ...	2	2	0
				Hartley, G. E. ...	10	6	
				Hay, Dr. J. ...	1	1	0
				Hayhurst, Mr. H. and Mrs. L. ...	1	1	0
				Herbert, Jas. L. ...	10	6	
				Herford, Miss A. C. ...	10	6	
				Hetherington, H. ...	10	6	
				Heywood Corporation Gas Dept. ...	1	1	0
				Horwich U.D.C. ...	2	2	0
				Hutchison, Col. R. T. ...	10	6	
				Huyton-with-Roby U.D.C. ...	4	4	0
				Hyde Corporation ...	3	3	0
				Hyde, Fred ...	1	1	0
				Irlam U.D.C. ...	2	2	0
				Johnson, W. A. ...	10	6	
				Johnston, S. ...	5	0	0
				Kay, Miss D. ...	5	0	0
				Keddie, Dr. J. T. Chalmers ...	10	6	
				Lancashire and District Coke Association ...	10	10	0
				Lancaster Corporation ...	3	3	0
				Lane, Mrs. W. ...	10	6	
				Langford, A. S. ...	10	6	
				Lapage, Dr. C. P. ...	10	6	

	£	s.	d.		£	s.	d.
Lee, Sir Kenneth	1	1	0	Walton, T.	10	6	
Lees, Miss M.	1	1	0	Warrington Corporation	5	5	0
Leigh Corporation	3	3	0	Wells, Dr. N. H.	5	0	
Littleborough Gas Co.	1	1	0	West's Gas Improvements Co. Ltd.	10	10	0
Littleborough U.D.C.	2	2	0	Whiston R.D.C.	1	1	0
Liverpool Corporation (1946)	26	5	0	Widnes Corporation	3	3	0
" (1947)	26	5	0	Wigan Corporation	5	5	0
Liverpool Gas Co.	10	10	0	Winsford Gas Co. Ltd.	2	2	0
Macclesfield Corporation	3	3	0	Workington Corporation	3	3	0
MacWilliam, Dr. H. H.	10	6		Wrexham Corporation	5	5	0
Manchester Corporation	26	5	0	Young, J. W.	1	1	0
Manchester Electricity Dept.	10	10	0				
Manchester Gas Dept.	10	10	0				
Manchester & Dist. Smoke Abatement Com.	10	10	0				
Marple U.D.C.	2	2	0				
Marple Gas Dept.	1	1	0				
Mather, L. E.	1	1	0				
Mather, W. L.	10	6					
Mather & Platt Ltd.	10	10	0				
Matthews, W.	1	0	0				
Melland, Will	4	2	0				
Melland, Mrs. W.	1	1	0				
Metro-Vickers Elec. Co. Ltd. (1946)	6	6	0				
" (1947)	6	6	0				
Middleton Corporation	3	3	0				
Middlewich Gas, Light and Coke Co.	2	2	0				
Mitchell, L. A.	1	0	0				
Morrison, Dr. J.	1	1	0				
Mossley & Saddleworth Gas Co. Ltd.	3	3	0				
Nantwich Gas Co. Ltd.	2	2	0				
Nelson Corporation	3	3	0				
Newton-le-Willows U.D.C.	2	2	0				
Northwich U.D.C.	2	2	0				
Oldham Corporation	10	10	0				
Oldham Gas Dept.	5	5	0				
Oliver, P. M.	1	1	0				
Orr, J. H.	10	6					
Packer, S. H.	10	6					
Pear, Mrs. C.	10	6					
Pike, Miss Irene	10	6					
*Polding, W. W.	10	6					
Pollard, J.	1	1	0				
Pontefract Bros.	2	2	0				
*Prest, J.	1	1	0				
Preston Corporation	10	10	0				
Preston Gas Co.	1	1	0				
Priestley, I.	10	6					
Radcliffe Corporation	2	2	0				
Refuge Assurance Co.	10	10	0				
Reynolds, Miss M.	10	6					
Rhyl U.D.C.	4	4	0				
Richards, Mrs. E.	5	0					
Robinson, Ald. J.	1	0	0				
Rochdale Corporation	5	5	0				
Royton U.D.C.	1	1	0				
St. Helen's Corporation	10	10	0				
Sale Corporation	3	3	0				
Salford Corporation	10	10	0				
Salford Electricity Committee	10	10	0				
Salford Gas Committee	10	10	0				
Scott, Mrs. A. O.	10	0					
Shaw, Mrs. M.	10	6					
Simon of Wythenshawe, Lord	2	2	0				
Simon-Carves Ltd.	5	5	0				
*Smith, Herbert	5	5	0				
Southport Corporation	1	1	0				
Stacey, F. E.	10	6					
Stalybridge Corporation (1946)	2	2	0				
" (1947)	2	2	0				
Stockport Corporation	10	10	0				
Stretford Corporation	4	4	0				
Stretford and District Gas Board	10	10	0				
Swale, W. E.	10	6					
Swinton and Pendlebury Corporation	3	3	0				
Taylor, H. F.	12	6					
Taylor, Miss M. R.	10	0					
Tootal, Broadhurst, Lee & Co. Ltd.	5	5	0				
Urmston U.D.C.	4	4	0				
Wallasey Corporation	5	5	0				

Division 4—North-East

Angus, Col. E. G.	3	3	0
Baker, G. M.	10	0	
Brandon and Byshottles U.D.C.	2	2	0
Caller, Dr. S.	10	6	
Chester-le-Street R.D.C.	2	2	0
Chester-le-Street U.D.C.	2	2	0
Durham R.D.C.	1	1	0
Easington R.D.C.	5	5	0
*Gandy, Mr. and Mrs. H.	1	10	0
Gateshead Corporation	10	10	0
Hartlepool Corporation	2	2	0
Hartlepool Gas and Water Co.	5	5	0
Hexham Gas Co.	2	2	0
Houghton-le-Spring U.D.C.	3	3	0
Imperial Chemical Industries Ltd. (Billingham Division)	10	10	0
Longbenton U.D.C.	2	2	0
Mouldsdales Williams, Mrs. A.	10	6	
Newcastle and Gateshead Gas Co.	10	10	0
Newcastle upon Tyne Corporation	15	15	0
Power Gas Corporation Ltd.	5	5	0
Sedgefield R.D.C.	3	3	0
Spennymoor U.D.C.	2	2	0
Stanley, Co. Durham, U.D.C.	4	4	0
Stockton-on-Tees Corporation	5	5	0
Sunderland Corporation	10	10	0
Washington U.D.C.	2	2	0
West Hartlepool Corporation	4	4	0
Whickham U.D.C.	2	2	0
Whitley Bay U.D.C.	1	1	0

Division 5—Yorkshire

Adwick-le-Street U.D.C.	2	2	0
Aireborough U.D.C.	3	3	0
Ambler, T. & Sons	1	1	0
Batley Corporation	3	3	0
Bentley-with-Arksey U.D.C.	2	2	0
Bingley U.D.C.	2	2	0
Bonner, J. R.	5	0	
Bradbury, D. J.	10	6	
Bradford Corporation Health Dept.	15	15	0
Bradford Civic Society	1	1	0
Bradford Gas Dept.	10	10	0
Bray, Geo. & Co.	10	10	0
Bridlington Corporation	4	4	0
Brighouse Corporation	3	3	0
Brighouse Gas Committee	21	0	0
Brown, G. L.	2	2	0
Castleford U.D.C.	3	3	0
Clayton Sons & Co. Ltd.	2	2	0
Clegg, E.	10	6	
Coke Oven Managers' Association	10	10	0
Colne Valley U.D.C. (1946)	2	2	0
" (1947)	2	2	0
Craddock, Mr. and Mrs. H.	1	1	0
Deane U.D.C.	2	2	0
Dewsbury Corporation	4	4	0
Doncaster Corporation	4	4	0
Elland-cum-Greeland Gas Co.	2	2	0
Elwell, Mrs. E.	10	6	
Goldstern, W.	10	6	
Graucob, F. Ltd.	2	2	0
Halifax Corporation	5	5	0

	£	s.	d.
Harrogate Corporation...	3	3	0
Hebden Royd U.D.C. Gas Dept. (1946)	1	1	0
" " " " (1947)	1	1	0
Hemsworth R.D.C.	3	3	0
Holmes, W. C. & Co. Ltd.	10	10	0
*Holmes, W. G.	2	10	0
Huddersfield Corporation	10	10	0
Hull Corporation	15	15	0
Keighley Corporation	3	3	0
Leeds Corporation	15	15	0
Leeds Electricity Dept.	10	10	0
Leeds Gas Dept.	25	0	0
Lister, H. & Sons Ltd.	2	2	0
Marrian, Miss M. E.	10	6	
Marshall, G. C.	5	0	
Mexborough U.D.C.	2	2	0
Micklethwait R. G.	10	0	
Mirfield U.D.C. (1946)	2	2	0
" " (1947)	2	2	0
Morley Corporation	3	3	0
Morton, Mrs. D. F.	10	6	
Neill, W. C. H.	10	6	
Nicholson, P. B.	10	6	
Osborne, Dr. H.	1	1	0
Pontefract Corporation	2	2	0
Pudsey Corporation	3	3	0
Redcar Corporation	2	2	0
Reeder, E. C.	10	6	
*Reif, Arnold E.	1	1	0
Robertson, G. W.	1	1	0
Rothwell U.D.C.	2	2	0
Scarborough Corporation	2	2	0
Scarborough Gas Co.	3	3	0
*Severs, J. S.	1	0	0
Sheffield and District Gas Co.	10	10	0
Sheffield, Rotherham and District Smoke Abatement Committee (1946)	31	10	0
Do. (1947)	31	10	0
Shipley U.D.C.	3	3	0
Slagg, J. H.	10	0	
Spenborough U.D.C.	3	3	0
Spenborough U.D.C. Gas Dept.	3	3	0
Stocksbridge U.D.C.	2	2	0
*Turner, T. Henry	10	6	
Wakefield Corporation	5	5	0
Warwick, H.	10	6	
Webb, R. N.	1	1	0
West Riding Group of Gas Companies	10	10	0
Wood, F. T.	10	6	
York Corporation	5	5	0
York, Harrogate and District Group of Gas Companies	14	14	0
Yorkshire Electric Power Co.	10	10	0
Yorkshire Gas Coke Association	25	0	0

Division 6—West Midlands

Adler, Dr. S.	1	1	0
Barrow, H.	5	0	
Best, J. K.	10	6	
Bilston Corporation	5	5	0
Birmingham Gas Dept.	5	5	0
Brierley Hill U.D.C.	3	3	0
Burton-upon-Trent Corporation	3	3	0
Cannock District Gas Co.	3	3	0
Cannock U.D.C.	3	3	0
Coventry Corporation	10	10	0
Halesowen Corporation	3	3	0
Harris & Co. Ltd.	1	11	6
Hayes, Mrs. A. L.	10	6	
Herbert, A. Ltd.	1	1	0
Hutchinson, G.H.	10	6	
Iron Bridge and District Gas Co. Ltd.	2	2	0
Johnson, R.	10	6	
Kidsgrove Gaslight Co.	3	3	0
Ludlow Union Gas Co. Ltd.	2	2	0
Malpas Gas Co. Ltd.	1	1	0
Manger's Salt Works Ltd.	10	6	
Market Drayton Gas Co.	2	2	0

	£	s.	d.
Meriden R.D.C.	3	3	0
Midlands Joint Advisory Council for Smoke Abatement	2	2	0
Newcastle-under-Lyme Corporation	4	4	0
Oldbury Corporation	6	6	0
Perry, W. R.	10	6	
Radiation Ltd.	10	10	0
Redditch Gas Co.	10	10	0
Rowley Regis Corporation	5	5	0
Rugby Corporation	3	3	0
Rugeley Gas Co.	2	2	0
Sedgeley U.D.C.	2	2	0
Shrewsbury Corporation	3	3	0
Shrewsbury Gas Light Co.	10	10	0
Smart, R. Cecil	5	0	
Smethwick Corporation	5	5	0
Solihull Gas Co.	1	1	0
Solihull U.D.C.	4	4	0
Stafford Corporation	1	1	0
Staffordshire County Council	26	5	0
Stephens, H.	1	1	0
Stoke-on-Trent Corporation	15	15	0
Stoke-on-Trent Gas Dept.	10	10	0
Stone Gas Light and Coke Co. Ltd.	2	2	0
Stourbridge Gas Dept.	1	1	0
Stourport Gas Co.	3	3	0
Tamworth Gas Light and Coke Co.	3	3	0
Tenbury Union Gas Co. Ltd.	2	2	0
Treize, W. E.	1	1	0
Uttoxeter Gas Works Ltd.	2	2	0
Wall, John M. Ltd.	1	1	0
Walsall Corporation	10	10	0
Wednesbury Corporation	3	3	0
Wellington (Salop) Gas Co.	10	10	0
Wem Gas Light and Coke Co. Ltd.	1	1	0
West Bromwich Corporation	5	5	0
Whitchurch (Salop) Gas Co. Ltd.	2	2	0
Willenhall U.D.C.	3	3	0
Wolverhampton Corporation	10	10	0
Wolverhampton Gas Co.	5	5	0

Division 7—East Midlands

Beeston and Stapleford U.D.C.	3	3	0
Blackwell R.D.C.	3	3	0
Bolsover U.D.C.	2	2	0
Boston Corporation	2	2	0
Cambridge Corporation	1	1	0
Charlesworth, Mrs.	5	0	
Chesterfield Corporation	4	4	0
Clarke, J. A.	1	0	0
Clarke, Dr. R. T. V.	10	6	
Cooper, L. C.	1	0	0
Coote & Warren Ltd.	1	1	0
Corby U.D.C.	2	2	0
Corrin, H. R.	10	6	
Dearden, J.	10	6	
Derby Corporation	1	1	0
Fry, Miss R.	1	1	0
Gainsborough U.D.C.	2	2	0
Gt. Grimsby Gas Co.	2	2	0
Gt. Yarmouth Gas Co.	4	4	0
Grimsby Corporation	5	5	0
Gurney, John	5	5	0
Hinckley U.D.C.	3	3	0
Heanor U.D.C.	2	2	0
King's Lynn Corporation	4	4	0
Kirkby-in-Ashfield U.D.C.	2	2	0
Kirman, H. H.	10	6	
Leicester Corporation	15	15	0
Leicester Gas Dept.	3	3	0
Lincoln Corporation	5	5	0
Long Eaton Gas Co.	10	10	0
Lowestoft Water and Gas Co.	2	2	0
Mansfield Corporation	3	3	0
McHugh, F. G.	5	0	
Melton Mowbray Gas Light & Coke Co. Ltd.	3	3	0
Messenger, Cllr. Mrs. R., J.P.	10	6	
Nottingham Corporation	15	15	0

	£	s.	d.
Pearson, Dr. S. Vere	1	10	0
Peterborough Corporation	4	4	0
Staveley U.D.C.	2	2	0
Sutton-in-Ashfield U.D.C.	3	3	0
Swadlincote District U.D.C.	2	2	0
Uppingham Gas Light and Coke Co. Ltd. ...	1	1	0
Workshop Corporation	3	3	0
Wright, J.	1	1	0

Division 8—South-West

Abercarn U.D.C.	2	2	0
Bath Corporation	4	4	0
Bideford-on-Avon Gas Co. Ltd.	2	2	0
Blaenavon U.D.C.	2	2	0
Bradshaw, Miss G.	5	0	0
Bristol Corporation	15	15	0
Bristol Gas Co.	5	5	0
Bromyard Gas Co. Ltd.	1	1	0
Brynmawr and Blaina Gas Co.	1	1	0
Caldicot & Dist. Gas Light & Coke Co. Ltd.	2	2	0
Campbell, Dr. A. F.	1	1	0
Camden Gas Co. Ltd.	4	4	0
Cardiff Corporation	10	10	0
Cawley, The Lady	2	0	0
Cheltenham Corporation	4	4	0
Cheltenham and District Gas Co.	10	10	0
Chepstow Gas Co.	2	2	0
Clevedon U.D.C.	2	2	0
Coulthurst, Mrs. A.	10	6	0
Cwmbran U.D.C.	2	2	0
Dixon, Thomas	10	6	0
Ebbw Vale U.D.C.	3	3	0
Exeter Gas Light and Coke Co.	10	10	0
Fry, Miss A.	10	0	0
Gas Consolidation Ltd.	10	10	0
Gloucester Corporation	8	8	0
Gloucester Gas Light Co.	5	5	0
Hereford Corporation	3	3	0
King's College, Taunton	1	1	0
Kingswood U.D.C.	2	2	0
Leominster Gas and Coke Co.	2	2	0
Llchwyr U.D.C.	3	3	0
Merthyr Tydfil Corporation	4	4	0
Monmouth Gas & Water Works Co. Ltd. ...	2	2	0
Morgan, D. & Sons	1	1	0
Mynyddislwyn U.D.C.	2	2	0
Neath Corporation	3	3	0
Newport Corporation	5	5	0
Newport (Mon.) Gas Co.	10	10	0
Pontypridd U.D.C.	3	3	0
Portishead U.D.C.	2	2	0
*Rogers, P.	2	2	0
Ross Gas Co. Ltd.	2	2	0
*Sanger, Mrs. A. D.	1	0	0
Seale, Mrs. I. L.	10	6	0
Severn Valley Gas Corporation Ltd.	10	10	0
Shaftesbury, Lady	10	6	0
Silburn, Mrs. E.	10	6	0
Stroud Gas Light and Coke Co.	3	3	0
Swindon Corporation	4	4	0
Swindon United Gas Co.	5	5	0
Thornbury R.D.C.	2	2	0
Tredegar U.D.C.	2	2	0
Wales and Monmouthshire Association of Gas Engineers and Managers	1	1	0
Welshpool Gas Co. Ltd.	1	1	0
Weston-super-Mare Corporation	2	2	0
Weston-super-Mare and District Gas Co. ...	1	1	0

Division 9—South-East

Acton Corporation	4	4	0
Acworth, A. W.	10	6	0
Acworth, Miss E. A.	1	1	0
Acworth, Miss W. B.	2	2	0
Adam, W. W.	1	1	0

Alston, Dr. J. M.	1	1	0
Andover Lighting & Power Co.	2	2	0
Ascot and District Gas and Electricity Co. ...	2	2	0
Ascot Gas Water Heaters Ltd.	10	10	0
Ashford, D. J.	15	0	0
Associated Gas and Water Undertakings Ltd.	10	10	0
Atkinson, Mrs. M.	1	0	0
Averill, C. R. Ltd.	1	1	0
Bakelite Ltd.	2	2	0
Banbury Corporation	2	2	0
Banbury Gas Light and Coke Co.	1	1	0
Barber, S. S.	10	6	0
Barking Corporation	1	1	0
Barnes Corporation	3	3	0
Bastian & Allen Ltd.	2	2	0
Battersea Corporation	10	10	0
Beard, J. R.	1	1	0
Bennett, M. J.	2	0	0
Bermondsey Corporation	4	4	0
Berry, Dr. J. A.	1	1	0
Bexley Corporation	5	5	0
Binderman, Mrs. A.	5	0	0
Blacker, E.	10	6	0
Bognor Gas and Electricity Co.	1	1	0
Bonstow, T. L.	10	6	0
Bosson, A., M.P.	2	2	0
Bournemouth Corporation	2	2	0
Bournemouth Gas and Water Co.	2	2	0
Braidwood, G. L.	10	6	0
Brighton, Hove and Worthing Gas Co.	5	5	0
British Electrical and Allied Manufacturers' Association	10	10	0
British Electrical Development Association ...	100	0	0
British Gas Council	262	10	0
British Medical Association	10	10	0
Broadstairs Gas Co.	1	1	0
Buzzacott, J. O.	2	2	0
Cable Makers' Association	10	10	0
Camberwell Corporation	10	10	0
Capper-Johnson, Dr. L.	10	6	0
Carshalton U.D.C.	1	1	0
*Chantler, P.	2	2	0
Charrington, Gardner, Locket & Co. Ltd. ...	5	5	0
Chatham Corporation	3	3	0
Chelmsford Corporation	3	3	0
Chelsea Corporation	3	3	0
Chertsey Gas Consumers Co. Ltd.	2	2	0
Chingford Corporation	1	1	0
Chislehurst and Sidcup U.D.C.	4	4	0
Chubb, Sir Lawrence	2	2	0
Clarke, D. K.	10	6	0
Clinch, H. G.	10	6	0
Coal Utilization Joint Council	10	10	0
Collier, Dr. W. A. L.	10	6	0
Commercial Gas Co.	3	3	0
Crayford U.D.C.	2	2	0
Crow, R. K.	10	6	0
Crowe, Councillor W. H.	1	1	0
Croydon Gas Co.	10	10	0
Dartford Corporation	3	3	0
Darwen, J.	1	1	0
Deal and Walmer Gas Co.	1	1	0
Dormer, A. E.	8	6	0
Dover Gas Co.	3	3	0
Eastbourne Gas Co.	2	2	0
East Cowes Gas Co.	1	1	0
East Ham Corporation	10	10	0
East Kent Gas Co. Ltd.	1	1	0
Edmonton Corporation	5	5	0
Edwards, Mrs. E. E.	10	6	0
Electrical Association for Women	10	10	0
*Elsworthy, J. G.	1	11	6
Enfield U.D.C.	1	1	0
Erith Corporation	3	3	0
Eton R.D.C.	3	3	0
Farnborough U.D.C.	2	2	0
Feltham U.D.C.	3	3	0
Finchley Corporation	4	4	0
Folkestone Gas and Coke Co.	2	2	0

	£	s.	d.		£	s.	d.
*Foss, Mrs. A. ...	10	6		Mitchell, Dr. C. A. ...	10	6	
Fox, F. ...	10	0		*Munro, Mrs. M. A. (1946)	10	6	
Frances, Miss J. ...	10	6		" (1947)	10	6	
Fry, Miss M. ...	18	2		Nonhebel, G. F. ...	1	1	0
Fulham Corporation ...	10	10	0	North Middlesex Gas Co. ...	10	10	0
*Gandy, Miss R. L. ...	10	6		Oxford Corporation ...	10	10	0
Gas Light and Coke Co. ...	52	10	0	Oxford and District Gas Co. ...	2	2	0
General Electric Co. Ltd. ...	10	10	0	Oxford Preservation Trust ...	1	1	0
George, A. K. ...	1	1	0	Paddington Corporation ...	5	5	0
*Gillison, Dr. J. A. ...	1	1	0	*Pitman, Ernest ...	1	0	0
Goodchild, C. R. ...	10	6		Parkinson, B. R. ...	7	6	
Goodeve, Sir C. F. ...	1	1	0	Pollitzer, E. ...	2	2	0
Gravesend Corporation ...	3	3	0	Portsmouth Corporation ...	2	2	0
Greater London Advisory Council for Smoke				Portsmouth and Gosport Gas Co. ...	1	1	0
Abatement ...	2	2	0	Pratt, A. G. ...	10	6	
Gower, Miss V. Leveson ...	5	0		Ratcliffe, J. S. ...	1	1	0
Gravesend and Milton Gas Light Co. (1946)	3	3	0	Rathbone, P. R. ...	10	6	
" (1947)	2	2	0	Reading Corporation ...	10	10	0
Greenwich Corporation ...	2	2	0	Reigate Corporation ...	1	1	0
Greenwood, T. A. S. ...	10	0		Reilly, Professor Sir Charles ...	10	6	
Guildford Corporation ...	5	5	0	Rheostatic Co. Ltd. ...	1	1	0
Gummer, R. H. ...	1	1	0	Rhonda, Lady ...	10	6	
Hackney Corporation ...	10	10	0	Richmond, A. C. ...	10	6	
Hammersmith Corporation ...	10	10	0	Richmond Corporation ...	3	3	0
*Hampson, G. B. ...	10	6		Roberts, J. M. ...	10	6	
Harrow U.D.C. (1946)	10	10	0	Robinson, Mrs. B. ...	2	2	0
" (1947)	10	10	0	Robinson, Mrs. E. ...	2	2	0
Hastings and St. Leonards Gas Co. ...	3	3	0	Rochester, Chatham and Gillingham Gas Co. ...	10	10	0
Herne Bay Gas Co. ...	1	1	0	Romford Corporation ...	2	2	0
Hessel Gas Co. ...	2	2	0	Ryan, J. ...	10	6	
Heston and Isleworth Corporation ...	5	5	0	St. Pancras Corporation ...	5	5	0
Hodgkinson, J. (Salford) Ltd. ...	5	5	0	Samuel, Viscount and Lady ...	1	1	0
Holborn Corporation ...	2	2	0	Sanitary Inspectors' Association ...	10	10	0
Hopthorpe, Brig. H. E. ...	10	6		Sheppy Gas Co. ...	2	2	0
Horder, Lord ...	5	5	0	Shore, Lt. Col. B. C. G. ...	10	6	
Hornchurch U.D.C. ...	3	3	0	Sigma Instrument Co. Ltd. ...	3	3	0
Hornsey Gas Co. ...	3	3	0	Sittingbourne District Gas Co. ...	1	1	0
Hyland, A. ...	10	6		Slough Corporation ...	3	3	0
Ideal Boilers & Radiators Ltd. ...	5	5	0	Slough Gas and Coke Co. ...	10	10	0
Institute of Fuel ...	10	10	0	Smith and Wellstood Ltd. ...	1	1	0
Institution of Electrical Engineers ...	26	5	0	Solid Smokeless Fuels Federation ...	10	10	0
Institution of Heating & Ventilating Engineers	10	10	0	South Suburban Gas Co. ...	10	10	0
Jast, Mrs. L. S. ...	10	6		South Eastern Gas Corporation ...	10	10	0
Keene, C. E. ...	1	0	0	Southall Corporation ...	3	3	0
Kemp, F. W. ...	10	6		Southampton Corporation ...	1	1	0
Kensington Corporation ...	1	1	0	Southampton Gaslight and Coke Co. ...	10	10	0
Kingston-on-Thames Corporation ...	3	3	0	Southend-on-Sea Corporation ...	10	10	0
Kirkman, Mrs. ...	1	1	0	Southwell, W. E. ...	10	6	
Kite, A. L. ...	10	6		Sturtevant Engineering Co. Ltd. ...	2	2	0
Lambeth Corporation ...	1	1	0	Sutton and Cheam Corporation ...	5	5	0
Lea Bridge and District Gas Co. ...	10	10	0	Taylor, Professor E. G. R. ...	1	1	0
Leader, Dr. R. A. ...	1	1	0	Thurrock U.D.C. ...	4	4	0
Lec, S. A. ...	10	6		Tiranti, Alec ...	5	0	
*Lessing, Dr. R. ...	1	1	0	Tottenham Corporation ...	10	10	0
Letchworth U.D.C. ...	2	2	0	Tottenham and District Gas Co. ...	10	10	0
Lethby, L. E. ...	10	6		Trier, F. Newton ...	2	2	0
Lewes Gas Co. ...	1	1	0	Tunbridge Wells Gas Co. ...	3	3	0
Lewin, Dr. O. M. S. ...	1	1	0	Twickenham Corporation ...	5	5	0
Lewisham Corporation ...	10	10	0	Vaughan-Cowell, Lt. Col. A. ...	1	1	0
Leyton Corporation ...	5	5	0	Uxbridge U.D.C. ...	3	3	0
Liptak Furnace Arches Ltd. ...	2	2	0	Uxbridge, Maidenhead, Wycombe and District			
London and Counties Coke Association ...	52	10	0	Gas Co. ...	10	10	0
London, Corporation of ...	26	5	0	Des Voeux, Mrs. H. A. ...	5	5	0
London Electric Supply Association ...	10	10	0	*Wadham, Miss D. ...	1	0	0
London Power Co. ...	2	2	0	Wandsworth Corporation ...	5	5	0
Low Temperature Carbonisation Ltd. ...	15	0	0	Wandsworth and District Gas Co. ...	10	10	0
Luton Corporation ...	10	10	0	Wanstead and Woodford Corporation ...	4	4	0
Maidenhead Corporation ...	3	3	0	Ward, Dr. F. A. B. ...	2	2	0
Maidstone Gas Co. ...	3	3	0	Watford Corporation ...	2	2	0
Malden and Coombe Corporation ...	3	3	0	Weatherfoil Heating Systems Ltd. ...	10	10	0
Margolis, A. E. ...	10	6		Wembley Corporation ...	10	10	0
Markham, Major S. F. ...	1	1	0	West Ham Corporation ...	1	1	0
Matthews, Mrs. M. ...	10	6		Westminster City Council ...	5	5	0
McGhie, A. T. S. ...	10	6		White, Dr. H. D. J. ...	10	6	
*McLachlan, T. ...	10	6		Whitstable Gas and Coke Co. Ltd. ...	1	1	0
Melland, Brian ...	1	1	0	Wickstead, J. H. ...	10	0	
Merton and Morden U.D.C. ...	4	4	0	Willesden Corporation ...	10	10	0
Mid-Kent Gas Light and Coke Co. ...	1	1	0	Wimbledon Corporation ...	4	4	0
Mitcham Corporation ...	2	2	0	Windsor Corporation ...	2	2	0

	£	s.	d.
Windsor Royal Gaslight Co. ...	2	2	0
Women's Gas Council ...	10	10	0
Wood Green Corporation (1946) ...	2	2	0
(1947) ...	2	2	0
Woodall-Duckham Vertical Retort Ltd ...	10	10	0

Overseas Subscriptions

	£	s.	d.
Hebley, H. F. (U.S.A.) ...	1	1	0
Vereeniging Town Council (S.A.) ...	19	4	
Subscriptions and donations under 5/-	...	18	0
	£3,244	18	6

Information about the Society

The forerunners of the Society were the Coal Smoke Abatement Society, established in London in 1899, and the Smoke Abatement League of Great Britain (1909), which was concerned mainly with the Provinces. The two bodies amalgamated in 1929 to form the present Society. In 1945 its growth and increasing influence made necessary a new constitution to which reference should be made for further information about membership, officers, Executive Council and Committees, etc.

Divisions

For electoral purposes and, where it is desired, area organisation, the Society is now composed of the following geographical Divisions: (1) Scotland, (2) Northern Ireland, (3) North West, (4) North East, (5) Yorkshire, (6) West Midlands, (7) East Midlands, (8) South West, (9) South East. (See Constitution for the counties in each Division).

Membership

The Society is wholly dependent on the contributions of its members for the maintenance and growth of its work, and invites the support of all who sympathize with and wish to promote its objects. These, to quote from the Constitution, are "to secure throughout the United Kingdom the maximum of natural light and air free from every form of pollution, and particularly that arising from the combustion of fuel."

There are four classes of membership—for individuals, local authorities, institutions and corporate bodies such as firms and public undertakings. Particulars of membership are given on the next page.

Individual members and the representatives of other members have rights of nomination and voting in elections for Officers and Council. They receive, free of charge, the Society's quarterly journal SMOKELESS AIR, and other publications. They are entitled to receive assistance and information on problems relating to smoke abatement. In addition to receiving notices of meetings and conferences organised nationally, they are entitled to participate in any activities organised by or in their own Division.

Associates

Any individual, local authority, institution or corporate body contributing less than the appropriate membership subscription may become an *Associate*, entitled to some of the privileges of membership, but not to those relating to nomination, voting and election to office.

Subscriptions

INDIVIDUAL MEMBERS—Not less than 10s. 6d. a year.

LOCAL AUTHORITY MEMBERS—Not less than the following amounts, according to populations :

Less than 25,000	...	...	...	2 guineas
25,000 to 50,000	...	...	...	3 „
50,000 to 75,000	...	...	...	4 „
75,000 to 100,000	...	...	...	5 „
100,000 to 250,000	...	...	...	10 „
250,000 to 500,000	...	...	...	15 „
Over 500,000	...	...	...	25 „

INSTITUTION MEMBERS (which includes Societies, Associations and Groups) *and*

CORPORATE MEMBERS (which includes Companies, Firms, and Departments of Local Authorities)—Not less than 10 guineas for members appointing two Representatives; not less than 5 guineas for members appointing one Representative.

SPECIAL CASES—The Executive Council may consider applications for membership on special terms as to subscriptions and otherwise. This rule is intended to apply in particular to local and other small voluntary associations wishing to become Institution Members.

ASSOCIATES—Any sum that is less than the appropriate subscription for membership.

DONATIONS—The Society will be pleased to receive single or annual donations for any amounts from non-members.

PUBLICATIONS—Annual subscriptions may be made for “ Smokeless Air ” and for other publications as issued.

PAYMENT OF SUBSCRIPTIONS—The first subscription should be forwarded with application for membership. This may be sent at any time, and the subscription remains in force until the first day of the corresponding month of the following year. It is mutually advantageous if subscriptions are made by Banker's Order.

Representatives

Local Authority, Institution and Corporate Members are entitled to appoint Representatives to exercise on their behalf the rights of members as regards nomination for office, voting, and receipt of publications, etc. Institution and Corporate Members may appoint one or two representatives each, and Local Authority Members a number according to population, as follows :

Less than 100,000	...	...	...	...	2
100,000 to 250,000	...	...	...	...	3
250,000 to 500,000	...	...	...	...	4
500,000 and over	...	...	...	...	5

The names and address of Representatives should be forwarded on making application for membership, so that they may be entered in the Voting Registers.

Services to members

Information and Advice

Members may obtain from the Society, at the discretion of the Executive Council, and free of charge, advice, assistance and information on questions relating to atmospheric pollution and its prevention.

Library

The Society possesses an extensive collection of books, reports, and pamphlets, British and foreign (largely U.S.A.) on smoke abatement and related subjects. Copies may be borrowed by members or consulted at Chandos House.

Lectures

The Society will be pleased to help members and others to arrange lectures and talks of all kinds in any part of the country on smoke prevention and related subjects. It is hoped very shortly to draw up a new Panel of Lecturers, similar to that in use before the war. This will indicate the area, subjects, types of meeting etc., with which each lecturer is concerned. Members qualified and prepared to have their names included in the Panel are invited to write to the General Secretary.

Lantern Slides and Films

The lantern slide collection is to be revised and extended and slides will be available on loan at a charge of 1d. each per lecture, plus postages. Slides for inclusion in this collection, especially of modern equipment, will be received with thanks. **Films**—The Society does not at present possess films of its own, but will be glad to suggest suitable films that may be available from other sources.

Exhibits

The pre-war exhibit service is being resumed and improved. Inquiries about the loan of exhibits, or the Society's participation in exhibitions should give the fullest details possible of what is required. In view of transport and packing difficulties material can be loaned more readily if it can be collected from and returned to Chandos House by car or van.

Posters

The following posters are available : (1) Set of pictorial and letterpress posters designed for use on ex-E.M.B. frames, but can be used singly. Price 2/6 per set. (2) New prize-winning photo-colour poster, 30 in. x 20 in. Price 6d. each. (3) New pictorial chart primarily for school use, "These are the Things that Smoke Does," 30 in. x 20 in. Price 6d. (Other charts to follow in due course). Reduced prices for quantities. Posters may be supplied free of charge in appropriate cases.

Literature

Inquiries are invited on the supply of publications, give-away leaflets, etc., for special purposes.

Photographs

A collection of photographs of smoke abatement subjects, suitable for reproduction and exhibition purposes, is being built up, and prints will be forwarded on request. Subjects required should be specified. Reproduction fees, where chargeable, at standard rates. New photographs of high pictorial quality are desired, by gift, copyright purchase, or other arrangement.

The Covenant Subscription Scheme

Particulars of the scheme that enables you to increase, without extra cost, the benefit of your subscription to the Society. We invite you to consider it.

For the purpose of the scheme the Society is recognised as a "charity" by the Commissioners of Inland Revenue, and it may claim for its own use the amount of the income tax that has been paid on the subscriptions it receives, provided that the subscriber has signed an agreement to subscribe a stated sum annually for a period of at least seven years.

Thus, if a member agrees to subscribe £5 a year, this amount is considered as what remains after a larger gross sum has been taxed, and the Society is able to claim the difference. With income tax at 9/- in the £ the gross amount is £9 1s. 10d., and the Society thus receives £4 1s. 10d. from the authorities. The benefit to the Society is thus nearly doubled at no further cost to the subscriber. A lower rate of tax would reduce the amount so recovered, but an increased benefit to the Society remains.

The only obligation into which the subscriber enters in order to assist the Society in this way is to covenant to continue the subscription for a minimum period of seven years, or during his life, which ever period should be shorter.

After the covenant has been signed the subscriber is not required to take any further action other than duly forwarding his annual subscription (or more conveniently paying it by Banker's

Order) and signing an Inland Revenue certificate which will be sent to him each year by the Society, to the effect that the subscription has in fact been paid and has been drawn from his "general fund of taxed income." The certificate will show the gross amount from which tax has been deducted, and the subscriber will be entitled to show such gross amount as a "charge" in his return of income for tax purposes, an advantage some will appreciate.

A specimen form of covenant is given below. Such a document may be prepared on plain paper by the subscriber, and, after being signed and witnessed, sent to the Society. If preferred, the Society will prepare and forward a document on receipt of the particulars required (*i.e.*, name in full, address in full, description or occupation, and the amount to be paid annually to the Society). The required stamping of the document will be attended to by the Society.

It will be noted that the gross amount concerned varies according to the rate of income tax, but that the sum that the subscriber pays direct to the Society does not alter. It is this sum that is stated in the covenant.

The specimen is in the form required by individuals, but corporate bodies will no doubt be able to modify it as may be required.

SPECIMEN OF COVENANT

I (name)..... of.....
 (address)..... (description or occupation).....
HEREBY COVENANT with the National Smoke Abatement Society, of Chandos House, Buckingham Gate, in the City of Westminster, that for a period of seven years from the first day of....., 194....., or during my life which ever period shall be shorter, I will pay annually to the said Society such a sum as will after the deduction of income tax at the rate for the time being in force amount to the sum of..... (amount in words), such sum to be paid from my general fund of taxed income.

IN WITNESS whereof I have hereunto set my hand and seal this..... day of..... 194.....

Signed, sealed and delivered by the said..... in the presence of

Signature (witness).....

Address.....

Occupation.....

(Signature).....

Recent Publications of the Society

Proceedings of the Edinburgh Conference, 1947. Contains in full the 20 papers read at the conference, with discussions. The main subjects are : Area Organization ; Work of Government Departments in Smoke Prevention ; Domestic Smoke Abolition ; Grit and Sulphur Problems ; Smoke and the Public Health ; Atmospheric Pollution in Great Britain. 108 pages 4s. 6d.

Proposals for New Legislation. Revised draft of the Society's proposals for new legislation (Prior Approval, etc.). 8 pages 6d.

Constitution. The new constitution of the Society in booklet form, as revised 1946 and 1947. 8 pages 2d.

New Edition in Preparation

The Law of Smoke Nuisances. By W. R. Hornby Steer, M.A., LL.B., Recorder of South Molton, Standing Counsel, N.S.A.S. This book is based on an earlier work by Randolph A. Glen, and fully covers the law as it applies in England and Wales under the Public Health Acts, 1936. In addition to Chapters on History, the Common Law, Private Houses, Trade Premises, London, Shipping, Railways, Vehicles, and Joint Action, it contains tables of statutes and cases and the relevant sections from the Public Health Acts and the Local Government Acts, 1933, in verbatim. The revised edition now being prepared will include material on the important City of London (General Powers) Act, 1946 and the Manchester Corporation Act, 1946, in each of which the new policies for smoke prevention are reflected. Cloth-bound 5s. 0d., Paper-backed 3s. 0d.

Published by Faber & Faber, Ltd.

Smoke : The Problem of Smoke and the Atmosphere. By Arnold Marsh. In its first part, this new book brings together and discusses the data on which rests the case against smoke. The second part reviews what has been done, the present position, and means for securing the progressive abolition of smoke. With full bibliography and references. 306 pages, plus 21 photographs. 21s. net. By post 21s. 6d.

(Continued on next page)

PUBLICATIONS—*continued from previous page*

Proceedings of the Brighton Conference, 1946. A full record of Papers and Discussions. The principal subjects covered are Smoke Prevention in New Houses, Proposals for New Industrial Legislation, and "What of the Future?" 84 pages 2s.

Smokeless Air. The Society's quarterly journal. The only magazine in the world devoted to the problems of atmospheric pollution. Gratis to members or 2s. 6d. per annum, post free.

Science Museum Exhibition Handbook. This is not only a detailed guide to the Exhibition, but, containing a series of twelve authoritative articles on the main aspects of the problem, is a permanent and useful reference book. 80 pages, medium 8vo. 6d.

Fumifugium : or the Smoke of London Dissipated. By John Evelyn. This rare and fascinating book, first published in 1661 by command of Charles II, has been republished by the Society with an introduction by Rose Macaulay. In spite of its age this indictment of the smoke evil by the author of the famous Diaries, remains true, witty and penetrating. Illustrated with original wood engravings and a portrait of Evelyn. Paper covers, 6d. Cloth-bound, 1s. 6d.

The State of the Atmosphere. A valuable and informative paper by the late Sir Frank Baines, F.R.I.B.A. With a section on the effects of smoke upon building stone. Royal 8vo, pp. 36. 6d.

Britain's Burning Shame. This pamphlet has been described in a review as "a masterpiece of modern popular propaganda." It puts the smoke problem in its simplest terms, especially as it affects the home, and is profusely illustrated. Single copies 2d. 12s. 6d. per 100.

Conference Proceedings. Copies are available at 1s. each of the full reports, containing papers and discussion of conferences held in 1932, 1934, 1936, (2s.), 1937, 1938 and 1943.

Smoke Emission Chart. A chart of tinted diagrams of different intensities of smoke, for making observations of chimney emissions. The grades shown are pale grey, grey, black and dense black. 3d. each, 2s. 6d. per dozen.

Smoke Abatement in Greater London. Report of a conference of London and Greater London Local Authorities, 1938. Including a paper read by the late Dr. J. S. Owens on "The present position and trends of Atmospheric Pollution in Greater London." 22 pages. 6d.

February, 1945, Joint Conference. Report of the joint conference with the Institute of Fuel, London, 23rd February, 1945. 8 papers and discussions, 45,000 words, 2s. 6d.

Smoke Control. Suggestions to Local Authorities on Guidance and Control in respect to new Fuel Burning Installations. 8 pages, 3d.

The Smoke Problem and Science Teaching. A booklet for teachers with notes and experiments. 8 pages, 3d.

Smokeless Zones. A booklet explaining the Society's proposals for ending the smoke nuisance by the setting up of smokeless zones. 3d.

NATIONAL SMOKE ABATEMENT SOCIETY *1949*

**OFFICERS * COUNCIL * DIVISIONS * LOCAL
AUTHORITY MEMBERS * INFORMATION**

**SERVICES * 19th ANNUAL REPORT (1948)
SUBSCRIPTIONS * ACCOUNTS * PUBLICATIONS**

MEMBERSHIP OF THE SOCIETY

Full particulars about membership and the organization of the Society are issued separately in an *Information* folder, with membership application and other forms. If you are not yet a Member of the Society and the folder does not accompany this Report, please ask for a copy and for specimen copies of SMOKELESS AIR, the Society's quarterly magazine, and other publications.

See page 20 for general information about membership.

GUIDE TO PUBLICATIONS

A Guide to Publications on Smoke Prevention and Allied Subjects has been prepared by the Society and is issued separately. Copies may be obtained on application. It contains full particulars of all the available books, reports and pamphlets issued by the Society and other publishers, classified according to subject and with cross-references.

See page 24 for announcements on some recent publications.

National Smoke Abatement Society

1949

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Central Offices

CHANDOS HOUSE, BUCKINGHAM GATE, WESTMINSTER, S.W.1

*ABBe*y 1359

National Smoke Abatement Society

President : The Rt. Hon. LORD SIMON OF WYTHENSHAW, LL.D.

Past Presidents : SIR GEORGE ELLISTON, M.C., M.A., J.P., D.L.,
WILL MELLAND, M.A., J.P.

Chairman of the Council : CHARLES GANDY, B.A.

Deputy Chairman : JOHN W. BEAUMONT, F.R.SAN.I., F.S.I.A.

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Standing Counsel : W. R. HORNBY STEER, M.A., LL.B.

General Secretary and Editor : ARNOLD MARSH, M.SC.TECH., M.INST.F.

Vice-Presidents :

- | | |
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| The Rt. Hon. the Viscount Samuel, P.C., G.C.B., G.B.E. | H. G. Clinch, F.R.SAN.I., F.S.I.A. |
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| | Violet Roberton, C.B.E., LL.D., J.P. |
| | Alderman G. J. Timmis, O.B.E., J.P. |

Elected Members of the Council

Scottish Division

- John Innes
Allan W. Ritchie, M.B.E., F.R.SAN.I.
Bailie Violet Roberton, C.B.E., LL.D., J.P.

North Western Division

- J. L. Burn, M.D., B.S., B.HY., D.P.H.
J. S. G. Burnett, M.D., D.P.H.
S. N. Duguid, J.P., B.SC.TECH., F.INST.F., F.R.SAN.I.
Charles Gandy, B.A.
W. L. Mather, M.C., M.A.
C. Metcalfe Brown, M.D., D.P.H.
Councillor Professor F. E. Tylecote, M.D.

North Eastern Division

- Councillor W. H. Bainbridge, J.P.
Alderman P. S. Hancock, O.B.E.

Yorkshire Division

- J. W. Beaumont, F.R.SAN.I., F.S.I.A.
I. G. Davies, M.D., B.S., M.R.C.P., D.P.H.
James Goodfellow, M.R.SAN.I., A.M.I.S.E.
James Law, M.R.SAN.I., M.S.I.A.

West Midlands Division

- G. W. Farquharson, M.S.I.A.
W. R. Martine, O.B.E., T.D., M.D., D.P.H.
C. A. Stansbury, M.R.SAN.I., M.S.I.A.

East Midlands Division

- F. G. McHugh, M.R.SAN.I.
A. Wade, M.B.E., F.R.SAN.I.

South Western Division

- Councillor R. Francis
F. R. Jefford, F.R.SAN.I., F.S.I.A.
F. J. Redstone, F.R.SAN.I., F.S.I.A.

South Eastern Division

- R. A. Baskett, B.E.M., F.S.I.A.
N. Bastable, M.R.SAN.I., F.S.I.A.
H. G. Clinch, F.R.SAN.I., F.S.I.A.
R. Lessing, PH.D., F.R.I.C., F.INST.F., M.I.CHEM.E.
G. Nonhebel, M.I.CHEM.E., F.R.I.C., F.INST.F.
A. J. Shinnie, M.D., D.P.H.
H. L. Snowden, M.S.I.A.
L. A. Stroud, D.P.A., F.R.SAN.I.
S. Swift, M.B.E.
W. Tillcock

Local Authority Members

as at 31st January, 1949

Division 1. Scotland

Aberdeen	Dundee	Irvine	Motherwell and
Airdrie	Dunfermline	Jedburgh	Wishaw
Ardrossan	Edinburgh	Johnstone	Paisley
Ayr	Falkirk	Kilmarnock	Perth
Clackmannan C.C.	Glasgow	Kilsyth	Port Glasgow
Clydebank	Greenock	Kirkcaldy	Renfrew C.C.
Coatbridge	Hamilton	Kirkintilloch	Renfrew
Dumbarton	Hawick	Lanark C.C.	Rothsay
Dunbarton C.C.	Inverness		Rutherglen
			Stirling C.C.

Division 3. North-West

Abram	Darwen	Macclesfield	Stalybridge
Accrington	Denton	Manchester	Stockport
Atherton	Droylsden	Marple	Stretford
Barrow-in-Furness	Eccles	Middleton	Swinton and
Blackburn	Failsworth	Nantwich	Pendlebury
Blackpool	Farnworth	Nelson	Urmston U.D.C.
Bolton	Glossop	Newton-le-Willows	Wallasey
Bootle	Hale	Northwich	Warrington
Burnley	Horwich	Oldham	Widnes
Bury	Huyton-with-Roby	Ormskirk	Wigan
Buxton	Hyde	Preston	Wilmslow
Carlisle	Irlam	Radcliffe	Workington
Chadderton	Lancaster	Rhyl	Wrexham
Cheadle & Gatley	Lancashire C.C.	Rochdale	<i>Associates</i>
Chester	Leigh	Royton	Birkenhead
Clitheroe	Littleborough	St. Helens	Chorley
Crompton	Liverpool	Sale	Southport
Crosby		Salford	Whiston

Division 4. North-East

Berwick-upon-	Darlington	Longbenton	Spennymoor
Tweed	Easington	Newburn	Stanley
Billingham	Eston	Newcastle-upon-	Sunderland
Blaydon	Felling	Tyne	Washington
Brandon and	Gateshead	Redcar	West Hartlepool
Byshottles	Hartlepool	Ryton	Whickham
Chester-le-Street	Hetton	Sedgefield	<i>Associates</i>
R.D.C.	Houghton-le-Spring	Seaham	Durham
Chester-le-Street	Lanchester	South Shields	Whitley Bay
U.D.C.			

Division 5. Yorkshire

Adwick-le-Street	Castleford	Huddersfield	Rawmarsh
Aireborough	Colne Valley	Hull	Rothwell
Batley	Conisborough	Keighley	Shipley
Bentley-with- Arksey	Dearne	Leeds	Stanley (Yorks.)
Bingley	Dewsbury	Mexborough	Stocksbridge
Bradford	Doncaster	Mirfield	Swinton
Bridlington	Halifax	Morley	Wakefield
Brighouse	Harrogate	Pontefract	York
	Hemsworth	Pudsey	<i>Associate</i>
			Scarborough

Division 6. West Midlands

Bilston	Halesowen	Rugby	Stourbridge
Birmingham	Kidderminster	Sedgley	Walsall
Brierley Hill	Meriden	Shrewsbury	Wednesbury
Burton-upon-Trent	Newcastle-under- Lyne	Smethwick	West Bromwich
Cannock	Nuneaton	Solihull	Willenhall
Coventry	Oldbury	Staffordshire C.C.	Wolverhampton
Darlaston	Rowley Regis	Stoke-on-Trent	<i>Associates</i>
Dudley		Stone	Derby
			Stafford

Division 7. East Midlands

Basford	Corby	Leicester	Rushden
Beeston & Stapleford	Gainsborough	Lincoln	Staveley
Blackwell	Grimsby	Lowestoft	Sutton-in-Ashfield
Bolsover	Heanor	Mansfield	Swadlincote
Boston	Hinckley	Market Harboro'	Workshop
Chesterfield	King's Lynn	Nottingham	<i>Associate</i>
	Kirkby-in-Ashfield	Peterborough	Cambridge

Division 8. South-West

Abercarn	Cardiff R.D.C.	Kingswood	Portishead
Abertillery	Cheltenham	Llchwyr	Swansea
Bath	Clevedon	Merthyr Tydfil	Swindon
Bathavon	Cwmbran	Mynyddislwyn	Thornbury R.D.C.
Bedwas & Machen	Ebbw Vale	Neath	Tredegar
Blaenavon	Gloucester	Neath R.D.C.	Ystradgynlais
Bristol	Hereford	Newport (Mon.)	<i>Associate</i>
Cardiff		Pontypridd	Weston-super-Mare

Division 9. South-East

Acton	Feltham	Paddington	Willesden
Banbury	Finchley	Reading	Wimbledon
Barking	Finsbury	Richmond	Windsor
Barnes	Fulham	St. Albans	Windsor R.D.C.
Battersea	Gravesend	St. Marylebone	<i>Associates</i>
Bermondsey	Guildford	St. Pancras	Bournemouth
Bexley	Hackney	Shoreditch	Carshalton
Brighton	Hammersmith	Slough	Dagenham
Camberwell	Hampstead	Southall	Enfield
Chatham	Harrow	Southend-on-Sea	Gosport
Chelmsford	Heston and	Southwark	Greenwich
Chelsea	Isleworth	Southwick	Holborn
Chingford	Hornchurch	Stepney	Kensington
Chislehurst &	Ilford	Stoke Newington	Lambeth
Sidcup	Kingston-on-	Sutton and Cheam	Luton
Crayford	Thames	Thurrock	Mitcham
Dartford	Letchworth	Tottenham	Poole
Dartford R.D.C.	Lewisham	Uxbridge	Portsmouth
East Ham	Leyton	Walthamstow	Reigate
Edmonton	London, City of	Wanstead and	Southampton
Erith	Maidenhead	Woodford	Wandsworth
Eton R.D.C.	Malden & Coombe	Watford	West Ham
Fareham	Merton & Morden	Wembley	Wood Green
Farnborough	Oxford	Westminster	

Scottish Divisional Council

Chairman : Allan W. Ritchie, M.B.E.,
F.R.SAN.I.

Hon. Secretary : John Traill, B.L.

Secretary's Office : City Chambers,
Glasgow.

Central 9600

Ext. 220

North West Divisional Council

Chairman : Councillor Professor F. E.
Tylecote, M.D.

Hon. Secretary : H. Moore

Secretary's Office : Public Health Dept.,
Town Hall,
Manchester.

Central 3377

Ext. 339

Yorkshire Divisional Council

Chairman : T. Henry Turner, M.Sc.

Hon. Secretary : James Goodfellow,
M.R.SAN.I., A.M.I.S.I.

Secretary's Office : Public Health Dept.,
12 Market Buildings,
Vicar Lane, Leeds, 1.
Leeds 30211, *Ext.* 11.

North East Divisional Council

Chairman :

Hon. Secretary : William Gray,
M.R.SAN.I., F.S.I.A.

Secretary's Office : Health Department,
Town Hall,
Newcastle-on-Tyne, 1
Newcastle 28520
Ext. 271-2.

Nineteenth Annual Report

for the Year ended 31st December, 1948

GENERAL REVIEW

It is always easier to report visible progress than the intangible changes in ideas and attitudes that may actually be of much greater importance. In the work for the prevention of atmospheric pollution there was again in 1948, as in all recent years, much useful material progress, together with many encouraging signs of developments in what could be called the mental climate of the country towards the reform. Despite some disconcerting evidence of ignorance about the waste of fuel that leads to smoke, and the waste caused by the smoke itself, it can now be said that there is among the better informed sections of the community a general acceptance of the case for more effective and far-reaching measures for smoke prevention than have so far been adopted in this country.

In the main this support is merely passive: action will be accepted, but is not demanded. A lead is called for, and above all, perhaps, actual working examples of smoke prevention in practice are now needed to demonstrate what can be done on a larger scale. The setting up of smokeless zones, the practical working of prior approval, the adoption of the new, smokeless methods of house heating are means available for such practical demonstrations. One of the Society's main functions in the near future may be to give publicity to many examples of smoke prevention in practice.

Government and Parliament

Undoubtedly the most important advance in this direction during the year was the Minister of Health's directive to Housing Authorities on the solid fuel burning appliances to be installed in new houses. The Authorities are now required to instal only the improved multi-fuel appliances that have been tested and approved. Consideration is being given to a similar

control over privately built houses. This, it will be remembered, is one of the recommendations of the Fuel and Power Advisory Council made in the "Domestic Fuel Policy" Report of 1946, and was first proposed by the Society in 1942. It is important not only for its practical consequences, but for the introduction of a new principle: for the first time in this country the community, for its own sake, is exercising control (i.e. "prior approval") over the family hearth. All further steps will be simply extensions of this principle. It is for the manufacturers of such appliances, and indeed for all of us who are interested, to see that these new fires are in every way more attractive, in design and operation, than the old coal fires they will replace.

Although it is one of the influences that cannot be measured, the creation of a firmer public opinion about atmospheric pollution has undoubtedly been helped considerably by the Ministry of Fuel and Power, and especially by the Minister (Mr. Gaitskell) personally. In a number of speeches, and at the Society's Cheltenham Conference in particular, the Minister has made important references to the smoke problem and its place in the affairs of the nation. The Fuel Efficiency Division of the Ministry, in its valuable work for the better utilization of fuel, has also done much to stress the factor of smoke prevention.

In Parliament there have been many questions, and references in speeches to smoke and allied problems. Specific nuisances, instances of grit emission, generating stations, and domestic fuel appliances were the most frequent subjects in the questions asked.

Smokeless Zones and New Legislation

Now that the improved fuel burning appliances are becoming standard for

new houses, the opportunity for complete smokelessness becomes possible as soon as smokeless fuels are more freely available and their use can be made obligatory. The complete transition to smokeless fuels will take many years to accomplish, and it is clear that it will be preferable to ensure that the change is first made effective in districts where smoke prevention is most needed. This can best be achieved by the establishment of smokeless zones, which, in addition, will provide one of the most valuable forms of the practical demonstrations mentioned above. The idea of smokeless zones has made remarkable progress since it was first developed by the Society some twelve years ago, despite some unhelpful and misinformed comment. During the year excellent work has been done and plans for the actual setting up of such smokeless zones, especially in City centres, have been prepared by Authorities, many of whom have by their local acts obtained statutory powers for that purpose. Salford has arranged for smokeless zones in and around five of its post-war housing estates, and Rochdale has given notice that its central area will be made a smokeless zone within a period of five years. In Coventry, following a town's meeting, the question was referred to a plebiscite of the whole electorate, and an overwhelming majority voted in favour of the inclusion of power to create smokeless zones in the local Act put forward by that city.

A further number of local authorities have obtained powers in local Acts for the prevention of smoke by means of clauses that require new installations to be free from smoke emission and allow for their prior approval. The extension of this local legislation, the form of which does not yet appear to have been made final, is bringing closer the time for national legislation, embodying the new principles of smoke prevention—prior approval, smokeless zones, and fuel control—but further study and observation of the working of the local Acts may first be needed. The position is being kept under the closest review by the Society.

Overseas Progress

In this general review of the year it will not be out of place to refer to progress in the United States and Canada, to which frequent reference has been made in articles and paragraphs in *SMOKELESS AIR*. In particular we would ask our members to note the action taken under new ordinances in St. Louis, Pittsburgh, Cincinnati, and other American cities, where the principles for which we are working are being put into effect with notable success.

The Consequences of Smoke

It is in the nature of things that there should be little new evidence forthcoming about the effects of smoke, but mention may be made of the authoritative conclusions of Dr. Percy Stocks of the General Register Office that "either smokiness of atmosphere is an important factor in itself in producing cancer of the lung, or sunshine is an important factor in preventing its incidence." (Studies on Medical and Population Subjects No. 1, Regional and Local Differences in Cancer Death Rates. General Register Office. H.M.S.O., 1947. Reviewed in *SMOKELESS AIR*, No. 65).

Articles by authorities have also appeared in *SMOKELESS AIR* during the year on the effects of air pollution, including its effect upon leather.

The severe fogs of November, 1948, brought smoke, or "smog" into the news, with many Press articles and discussion on its effects and cost. Unfortunately, there is much confusion of thought as between natural fog, smoke impregnated fog, and smoke itself, and their respective consequences. It is significant to note that in the administrative county of London the number of deaths due to bronchitis rose from 73 during the week before the fog to 148 during the week of the fog. This outstanding effect upon life itself, to which attention was first drawn by an article in *The Lancet*, received hardly any comment in the general Press. A vigorous leading article in the London *Evening Standard* was a commendable exception. World-wide publicity was,

however, given to the case of Donora, in the United States, where an exceptionally dense fog occurred in still atmosphere during October, 1948, and resulted in 19 deaths and some 400 hospital cases.

It is not possible to mention in detail many other events and matters of importance to the movement that occurred during 1948. The subject was discussed at a number of conferences other than those of the Society ; many

local authorities have been increasingly active (cf. "Progress Reports" in the *Cheltenham Conference Proceedings*) ; and the Regional Committees of local authorities have continued to make good progress. Among the latter the principal development during the year was the enlargement of the Greater London Advisory Council for Smoke Abatement to become the London and Home Counties Smoke Abatement Advisory Council.

THE SOCIETY

Although no outstanding features in the Society's work or fortunes occurred during 1948, the year saw the carrying out of many useful activities and a modest but healthy increase in membership and income ; 88 new members were enrolled during the year, with subscriptions amounting to £230 annually.

Over 350 local authorities are now affiliated to the Society, 323 as full members and 30 as associates.

The Survey of Atmospheric Pollution

A most important activity has been the carrying out of the first survey of the sources and incidence of atmospheric pollution on the lines proposed to and approved by the Edinburgh conference. Two sets of questionnaire forms were drawn up, the first short and general, the second more detailed. These were sent to every local authority in the country, nearly 700 of which completed and returned the forms. The analysis of the returns, even to a partial extent, has been a considerable task. An interim report on the Survey was prepared and presented to the Cheltenham conference by A. J. Cousin, and included in the *Proceedings* of that meeting. Much further information is available in the detailed replies, but in view of the work involved and other difficulties this is being extracted for specific purposes only as and when it is required.

The Cheltenham Conference

The attendance at the annual conference in Cheltenham at the end of September was a few less than the record number at Edinburgh in 1947.

The most important feature was the visit of the Minister of Fuel and Power, who honoured the conference with an address of exceptional interest. New features in the programme were a series of "Progress Reports," and a "Brains Trust" session, both most successful. The generous hospitality given by the Mayor and Council of Cheltenham was greatly appreciated, as was the assistance of Officers at the Corporation in organizing the conference.

The resolutions adopted are recorded in the *Proceedings*, which as usual includes the papers and address in full, with reports of the discussions.

Deputation to the British Electricity Authority

Following resolutions passed at the 1946 and 1947 conference a small deputation from the Society met Lord Citrine and Mr. (now Sir John) Hacking of the British Electricity Authority in August to discuss the question of grit and sulphur emissions from generating stations. It was felt during the interview that the Authority is genuinely concerned about the problem and is doing all that is at present technically practicable to minimize grit from new stations, while continuing to investigate the more difficult and expensive problem of sulphur washing. A full report appeared in *SMOKELESS AIR*, No. 68 (Autumn/Winter, 1948).

President

The election of Lord Simon of Wythenshawe as President has been widely welcomed, not least by those who have been associated longest with the Society and who remember his

many services in the early days of the Smoke Abatement League of Great Britain. More recently his Chairmanship of the Fuel and Power Advisory Council which issued the *Domestic Fuel Policy* report and so strongly emphasized the need for smoke prevention and the means of attaining it, has placed the Society under a new debt of gratitude to him.

We should like to take this formal opportunity of recording on behalf of the Executive Council and the Society as a whole, our most grateful thanks and appreciation to Sir George Elliston for his very considerable services to the Society during his term of office as President. He has created many friends in the Society, and we are glad that the constitution allows him to remain an Officer as immediate Past President.

Obituary

It is with regret that we have to record the deaths, during the year, of several members and friends of the Society. The death of Sir Lawrence Chubb which occurred in February, 1948, was mentioned in the last annual report, and a tribute was there paid to his many years' association with the Society. Mr. William Nicholson, former Chief Smoke Inspector for Sheffield, died during the year, his pioneering work in smoke administration, including the remarkably successful administration he helped to create in Calcutta, and his authorship of a practical textbook "Smoke Abatement" in 1927, will be especially remembered. Mr. Philip B. Nicholson, of the Coke Oven Managers' Association, will also be remembered as a very good friend of the Society.

In December the death occurred of W. Brownhill Smith of Glasgow. Usually known as Bailie Smith, he was for many years Acting President of the Scottish Branch of the Society, and was at one time very well known for his vigorous papers on smoke abatement and the impetus he gave to the movement in its early and most difficult days. He was 85, and his interest in the Society had continued unbroken.

Another Scottish member, Robert MacLaurin, inventor of a low temperature carbonization process, and a keen

advocate for a new outlook on coal carbonization also died during the year.

The Divisions

Reports from the three established Divisional Councils which follow this report will show how well they are working in their respective areas, and, it may be added, with quite modest expenditure.

Arrangements were being made, towards the end of the year, to set up divisional Councils in the North East and East Midlands areas, and it is hoped to report their inaugural meetings in the near future.

Areas remaining without Divisional organization are the West Midlands, South West and South East. Although headquarters will give every help possible in setting up and maintaining Divisional Councils the initiative must come from the members and representatives in the Divisions themselves.

Publications

Although the production of new publications and their effective distribution continues to be impeded by lack of funds and of staff, there was nevertheless issued during the year a new and revised edition of *The Law of Smoke Nuisances* by our Standing Counsel, W. R. Hornby Steer, the demand for which continues to be well maintained. There was also published a new propaganda and information pamphlet *Guilty Chimneys*, in which the case against smoke is given in a hundred quotations from authoritative writers, speakers and official reports. It includes some striking new photographs and a centre fold of diagrams and maps in colour. It is one of the most attractive of the Society's publications and has created much attention and favourable comment; 2,000 copies have already been sold or distributed, but a much wider circulation of this most valuable pamphlet is possible and has been strongly urged by all who have seen it and in the numerous press notices it has obtained.

Other publications issued during the year were the *Edinburgh Conference Proceedings* and separate reprints of several of the papers it contains; *Smokeless Air*; and the new *Guide to*

Publications on Smoke Prevention and Allied Subjects mentioned below.

Book-selling Organization

The Society has of course always sold its own publications direct, and it has now entered into an agreement with the Publishers' Association by which it is able to obtain at trade rates any publications relating to smoke and allied subjects and to sell them at the normal retail price. Not only will this enable the Society to improve its services to members and others, but it will bring in a small profit. To assist sales and to show what is available a classified list of publications has been issued and is already proving of considerable value.

Exhibitions

During 1948 material was supplied for Local Government exhibitions at the following: Dagenham, Keighley, Crayford, Morley, Aireborough, Widnes, Coventry, Brighouse, Blackburn, Berwick, Dewsbury, Burton-on-Trent, Batley, Hackney, Hazel Grove and Leeds. In addition to the above, during May, an exhibition was staged by the Society in the Library of the Royal Institution, London. The Society also took part in the International Town and Country Planning Exhibition held at Olympia in November.

Two new display panels were introduced during the year. These were designed mainly for use at Local Government exhibitions, and are designed for table display. Further panels of similar design are being prepared. It has been found that larger exhibition pieces will not stand up to the rough handling received in transit.

Photographs

In June a letter from the Society was very kindly published in most of the photographic journals, advising their readers that the Society wished to obtain more photographs of smoke emission, for which the normal reproduction fees would be paid. As a result a considerable number of photographs were, and continue to be, received, and although comparatively few are of outstanding quality it has

been possible to increase our collection. The total number of different subjects now stands at about 250, and they have been classified and so arranged that examination and selection are simplified. Not only is this collection of value to the Society for its own work, but it enables the Society to meet the growing demand for loans of smoke photographs for Press reproduction, exhibition purposes and lecture illustrations.

Press Services

During the year it was arranged that the issue of Press notices, "stories" and publications for review should be prepared and distributed direct by the Society instead of through a Press agent. This has led to economies and, although it has increased the amount of office work, has been successful both in the results obtained and in contacts made with newspapers and other journals and their representatives. It must, however, be appreciated that Press publicity, which can be so valuable to the Society, is dependent above everything else on material of real news interest.

The number of Press cuttings relating to the Cheltenham conference was a record for any of the Society's activities—325. There has also been a gratifying number of appreciations of *Guilty Chimneys*, including several published in Dominion and other overseas newspapers.

Staff

Staff changes early in the year led to some difficulties and delays at headquarters, but new members have been engaged, and on the technical side and for other special purposes the Society is being assisted very helpfully indeed by Mr. A. J. Cousin, M.INST.F., formerly of the Patents Office and the Ministry of Fuel and Power.

Lack of funds, and indeed at the moment of office accommodation, prevent the further extension of staff that is undoubtedly needed. The demands on the Society tend to grow more rapidly than they can be dealt with, not so much in more apparent large-scale activities, but rather in the growth of day-to-day inquiries, requests

for advice, publications, photographs, exhibits, the approval of Press articles and so on. It is an encouraging sign that the Society should be "used" so much more, but without the funds to strengthen the small organization it is obvious that difficulties and strains will continue.

Finance

These points lead to the general question of finance. The statement of accounts accompanying this report is to June 30th, 1948, only, and during the second half of 1948 expenditure showed a material, although not yet alarming, excess over income. Efforts have been made during the year to secure new support on a really helpful scale, but results cannot at present be reported.

Incidental approaches for new membership during the year led to the small net improvement mentioned in the opening paragraphs of this report, but it will be apparent that, particularly in view of the present high costs involved in all forms of publicity, and printing, etc., the Society cannot exert anything like its potential influence unless it can at least double or treble its present income.

The problem of finance continues to be the most difficult that the Society has to face and diverts attention from the primary work for which our organization exists. Advice or suggestions from members on this matter will therefore be most welcome.

CHARLES GANDY, *Chairman*.

E. W. SMITH, *Hon. Treasurer*.

ARNOLD MARSH, *General Secretary*.

SCOTTISH DIVISION

The Scottish Division of the Society, during the year 1948, suffered serious losses by the deaths of ex-Bailie W. Brownhill Smith of Glasgow, Miss Alexia B. Jack of Edinburgh and Mr. Robert MacLaurin of Stirling, and by the resignation of ex-Provost Robert Irvine, Coatbridge. The late ex-Bailie W. Brownhill Smith was one of the founders of the Smoke Abatement League, and so great was his faith and outspokenness as to the value of the objects of the League, that it was often passed off by those who would not be convinced as fanaticism. Miss Jack represented the Scottish Council of Women Citizens' Associations, and earned the respect of the members because of the quality of quiet determination which she conveyed when in attendance at meetings of the Society. Mr. MacLaurin will always be remembered for his unfettered criticism when he suspected dilatoriness on the part of the Society or Government Departments and for the inconvenience he would suffer in order to convince the opposition of the value of his theories. The name of ex-Provost Robert Irvine of Coatbridge was first mentioned in the records in the year 1928, and appeared regularly until he found that, due to advancing age and the difficulty of attending meetings, he was forced to

tender his resignation. An examination of the membership of the Division is sufficient to confirm that the unselfish devotion to the cause by those pioneers of the Society has not been in vain.

New members, including Local Authorities and other bodies, have been enrolled throughout the year, which is a sure indication that the Society is achieving one of its objects, viz.: to create by publicity and education an informed national opinion on the value and importance of unpolluted air. In other respects it is difficult to assess the practical results achieved by the Scottish Division. Certainly the conferences in recent years have been well attended, the speakers thereat being experts in their particular branches of industry, and they have been called upon to deal with many questions which showed that keen interest had been aroused in the steps taken and to be taken by industrial concerns to improve the design of all types of appliances using combustible fuel.

The courses for boiler house firemen have been, as in past years, most successful, the present roll being 146. This is due firstly to the great support given by the Corporation of Glasgow, who supply the accommodation for the classes and make a financial contribution towards the cost, and secondly to the

excellence of the lecturer who possesses not only ability, but a capacity for hard work. At the completion of each course a social evening is held, when prizes and certificates are awarded to successful students. The opportunity is then taken to stress the value of certificates in all walks of life. To extend the practical side of the course, arrangements are made for the students to visit

modern plants and up-to-date local collieries so that the methods of cleaning and grading of fuels can be inspected. Film shows have become a regular feature of the classes and illustrate fuel mining processing methods, boiler house practice and the methods for the utilisation of steam and conservation of heat in process furnaces.

J. TRAILL, *Hon. Secretary.*

NORTH WEST DIVISION

A review of the activities in the North West Division during the year 1948 affords the Divisional Council a reasonable measure of satisfaction because it has been a year of progress and achievement.

The scope and influence of the Society has been extended for the Divisional Council has continued to meet at regular intervals at different centres within its territory. Meetings have been held at Horwich, Wigan, Urmston and Atherton by the kind invitation of those local authorities. At the conclusion of the formal business of the Council, an address on the local conditions with regard to atmospheric pollution has been given by a speaker from the locality. Discussion has been full and forthright, keen criticism being tempered with practical advice and constructive suggestion. This sharing of experience and specialised knowledge has been of great benefit to all, engendering a more faithful appreciation of the problems and difficulties. It is believed that by these means, the cause of smoke abatement is being stimulated and the reputation of the Society enhanced.

Joint meetings with other organizations have been held with great success; in January over 300 delegates attended a joint meeting with the Institute of Fuel to discuss a paper on "District Heating." Considerable interest was shown in this topical subject and the event was one of the highlights of the year.

In May we joined forces with the Manchester and District Regional Committee to hear an address on the Fuel

Situation by an official of the National Coal Board.

The Annual Meeting held in July did not attract as good an attendance as had been hoped. Those present, however, gained much useful and authoritative information from an address by Mr. Kirkman of the Regional Ministry of Fuel and Power who dealt with Domestic Fuel Problems with particular reference to the new appliances.

Whilst the work within the Division proceeds, the Divisional Council seek every opportunity to stimulate the activities of the National Society exemplified in the resolutions submitted and approved at the Cheltenham Conference. These sought the early implementation of certain of the recommendations of the Simon Committee report on Domestic Fuel Policy. It is gratifying to note that shortly after the Conference the Minister of Health took action on one of the recommendations which had been stressed by the North West Division. This success places the hallmark of progress on the year 1948 and we look forward with eager anticipation to further advancement. It would be most fitting if most of the recommendations could be put into force during Lord Simon's term of office as our President.

The North West will strive to maintain "Progress" as the keynote of its endeavours and will always be ready to give the fullest support to any project of the Society which is directed towards the fulfilment of our objectives.

H. MOORE, *Hon. Secretary.*

YORKSHIRE DIVISION

Since our first Annual General Meeting in November, 1947, the Yorkshire Divisional Council has met four times, in January, April, September and October. The average attendance has been nine, which considering the distance separating the members who come from as far afield as Hull and Halifax, gives an indication of the great interest shown in our efforts to effect some improvement in the state of the atmosphere.

We have greatly regretted losing the help of Mr. W. R. T. Skinner through his removing from the Yorkshire area early in the year, but have been very fortunate in that Mr. W. M. Lapper, O.B.E., Chairman of the Yorkshire Electricity Board has succeeded him on the Council. Our ranks have been further strengthened by the co-option of Dr. R. A. Mott, F.R.I.C., F.INST.F., Superintendent for the British Coke Research Association at the Midland Coke Research Station in Sheffield, and who is also on the Committee of the Yorkshire Section of the Institute of Fuel. The Council is now representative of many Yorkshire towns and numerous civic, industrial and domestic aspects of Yorkshire life.

A joint meeting with the Yorkshire Division of the Institute of Fuel, which was also open to other interested organizations, was held in Sheffield in April. The meeting was opened by the Lord Mayor of Sheffield and the attendance was approximately 50. Two papers were given: "The Technical and Economic Aspects of the Industrial Use of Fuels," by Dr. H. Alex Fells, of the Institute of Fuel; and, "Smoke Abatement and Fuel Economy," by Mr. T. Henry Turner, the Chairman of the Yorkshire Divisional Council.

On October 15th a Technical Conference was held in Leeds under the auspices of the Divisional Council to discuss "The Measurement of Atmospheric Pollution." This Conference

was arranged specially for those directly interested in obtaining measurements of smoke deposits and was attended by Dr. Meetham from the Department of Scientific and Industrial Research. The attendance of 53 was very good indeed and consisted of representatives from some 28 Local Authorities and 7 other interested organizations in the Yorkshire area. The discussion on the present methods of measuring atmospheric pollution and on the instruments now in use was exceedingly good and produced a great deal of very useful information with regard to the number of stations, types of instruments in use, and of the various difficulties met with in the work of pollution recording.

Officers and members of the Council have also been very active in meetings arranged by other organizations in the area. Our Chairman attended and spoke at a meeting held in Mexborough to protest against sulphur dioxide emission from the 125 feet chimneys of the new Mexborough Power House, and it is now promised that the chimneys will be raised to their designed height of 250 feet during 1949. Mr. Turner also took part in a meeting of the Doncaster Civic Trust to recommend that the new Doncaster Power House should be sited down-wind instead of up-wind of the town. Mr. James Law, Sheffield, and Alderman Hill, Batley, attended the second Technical Conference of Analysts on Smoke Testing held in London in March.

Although Leeds is the most convenient centre for meetings of the Divisional Council, arrangements have been made to hold meetings in other parts of the area in order to further publicize the work. Thanks are due to all members in the Yorkshire Division for their efforts in making this, our second year, so successful and our prospects for 1949 so encouraging.

JAMES GOODFELLOW, *Hon. Secretary.*

NATIONAL SMOKE ABATEMENT SOCIETY

Income and Expenditure, Year ended June 30th, 1948

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Year ended		1948		1947		EXPENDITURE		1948	
June 30th, 1947		£	s. d.	£	s. d.	June 30th, 1947		£	s. d.
INCOME									
Subscriptions	3,244 18 6	...	...	...	...	Salaries and Fees	...	...	2,020 10 1
Less Refunds	...	...	...	...	...	Rent, Rates, Gas, Water and Heating	...	...	375 3 8
		...	...	...	...	Office Supplies and Stationery	...	...	141 1 4
Sale of Literature	105 2 9	...	...	...	...	Travelling Expenses	...	...	45 19 4
Repayment of Income Tax	51 4 1	...	...	...	...	General Expenses, Postages and Telephone	...	...	392 17 11
Conference Receipts (Edinburgh)	372 15 0	...	...	...	...	Divisional Expenses	...	...	60 0 0
(Brighton)	...	...	...	...	...	Printing <i>Smokeless Air</i>—	...	...	...
Sundry Receipts	...	...	...	...	...	Less Receipts from Advertisements	...	...	197 19 0
DIVIDENDS FROM INVESTMENTS, ETC.	...	...	...	...	...	Printing and Publishing Booklets, etc.	...	...	578 2 3
Commercial Union Assurance Co., Ltd.	5 3 1	...	...	...	...	Edinburgh Conference, 1947, Expenses, etc.	...	...	563 19 7
British Transport Stock	6 17 8	...	...	...	...		...	...	...
(L.M.S.)	...	...	...	...	...	Staff Pension Scheme	...	...	93 8 7
Post Office Savings Bank	12 12 6	...	...	...	...	Furniture and Fittings	...	...	160 19 0
Interest—Manchester and Salford Savings Bank	11 7 6	...	...	...	...	Surplus of Income over Expenditure	...	...	...
Excess of Expenditure over Income	...	...	...	...	...		...	...	...
	£3,810 1 1	...	...	...	...		...	...	£4,630 0 9

Defence Bond Fund

Year ended		1948		1947	
June 30th, 1947		£	s. d.	£	s. d.
Balance, June 30th, 1947	...	...	...	...	...
Interest	...	...	...	...	...
	£500 4 4	...	...	...	...
	£515 3 3	...	...	...	...

Balance Sheet, June 30th, 1948

Year ended		1948		1947	
June 30th, 1947		£	s. d.	£	s. d.
SURPLUS—					
Balance as at June 30th, 1947	...	...	...	...	...
Less Excess of Expenditure over Income	...	...	...	...	...

Add Surplus, 1947	...	...	...	...	...
Fees received on account—Cheltenham Conference	...	...	...	...	...
(Edinburgh)	...	...	...	...	...
Subscriptions in advance	...	...	...	...	...
DEFENCE BOND FUND—	...	...	...	...	...
Balance	...	...	...	...	...
	£3,256 14 7	...	...	...	...
	£3,109 7 7	...	...	...	...

Subscriptions and Donations

for the Year ended 30th June, 1948

* Denotes Covenant Subscriber

Division 1—Scotland

	£	s.	d.		£	s.	d.
Aberdeen Corporation	10	10	0	Affleck & Brown Ltd.	2	2	0
Airdrie Corporation	3	3	0	Altrincham Gas Company	2	2	0
Ardrossan Corporation	2	2	0	Andrew, W. H.	1	0	0
Ayr Corporation	3	3	0	Anonymous	20	0	0
Bowies Associated Services Ltd.	17	6		Anonymous	1	1	0
Brown, Robert C.	1	1	0	Ashton Bros. & Co., Ltd.	2	2	0
Clackmannan County Council	3	3	0	Ashton Gas Company	3	3	0
Clydebank Corporation	3	3	0	Ashton-under-Lyme Electricity Dept.	2	2	0
Coatbridge Corporation	3	3	0	Ashworth, J. R.	10	6	
Currie, T. S.	10	6		Atherton U.D.C. (1947)	2	2	0
Dumbarton Corporation	2	2	0	" (1948)	2	2	0
Dunbarton County Council	4	4	0	*Barash, Dr. M.	10	6	
Dundee Corporation	10	10	0	Barrow-in-Furness Corporation	4	4	0
Edinburgh Corporation (1947)	15	15	0	Baxendale & Co., Ltd.	2	2	0
(1948)	15	15	0	Bayes, Mrs. M.	2	2	0
Edward, J.	1	1	0	Beard, E.	1	1	0
Falconer, Mrs. J.	10	6		Beattie, E. & F. Ltd.	1	1	0
Falkirk Corporation	3	3	0	Behrens, A.	10	0	
Glasgow Corporation	26	5	0	Bibby, J. & Sons, Ltd.	10	10	0
Glasgow Women Citizens' Association	1	1	0	Bibby, H. P.	2	0	0
Gratridge, H. H.	5	0		Birkenhead Corporation	2	2	0
Greenock Corporation	5	5	0	Blackburn Corporation	10	10	0
Hamilton Corporation	3	3	0	Blackpool Corporation	10	10	0
Hawick Corporation	2	2	0	Bolton Corporation	10	10	0
Heriot-Watt College	1	1	0	Boole Corporation	5	5	0
Howden, J. & Co., Ltd.	10	10	0	Briggs, C. Rawdon	1	0	0
Inverness Corporation	3	3	0	Brooke, T. H.	10	6	
Irvine Corporation	2	2	0	Brown, Mrs. J. H.	1	0	0
Jedburgh Corporation	2	2	0	Bulmer, H. E.	10	6	
Jewell, Mrs. K. I.	10	6		Burnley Corporation	5	5	0
Johnstone Corporation	2	2	0	Burnley Corp. Gas Dept. (July, 1947)	1	1	0
Kilmarnock Corporation	3	3	0	" (Nov., 1947)	1	1	0
Kilsyth Corporation	2	2	0	Bury Corporation	4	4	0
Kirkintilloch Corporation	2	2	0	Buxton Corporation	2	2	0
Lanark County Council	15	15	0	Carlisle Corporation	4	4	0
Macadam, I.	10	6		Chadderton U.D.C.	3	3	0
Macmillan, A. M.	1	1	0	Cheadle and Gatley U.D.C.	3	3	0
McCallum & Craigie	10	6		Chester Corporation	3	3	0
McKay, W. C.	10	6		Chester United Gas Co.	2	2	0
Millar, A. W.	5	0		Chorley Corporation	2	2	0
Paisley Corporation	5	5	0	Chorlton, Miss M. D.	10	6	
Paton, T.	10	6		Clitheroe Corporation	2	2	0
Perth Corporation	3	3	0	Cooper, Miss I.	1	1	0
Port Glasgow Corporation	2	2	0	Coulthard, Miss D.	10	6	
Renfrew Corporation	2	2	0	Crompton U.D.C.	2	2	0
Renfrew County Council	10	10	0	Crosby Corporation (1947)	4	4	0
Ritchie, G. B.	10	6		" (1948)	4	4	0
Robertson, Bailie, Dr. V.	1	1	0	Darwen Corporation	3	3	0
Rothsay Corporation	2	2	0	Davies, D. E.	10	6	
Royal Sanitary Association of Scotland	1	1	0	Dean, F. H.	10	0	
Rutherglen Corporation	3	3	0	Droylsden U.D.C.	3	3	0
Scott Park, Dr. and Mrs. S. D.	10	6		Duguid, Mr. and Mrs. S. N.	1	1	0
Scottish Junior Gas Association	1	1	0	Eccles Corporation	3	3	0
Smith, Mrs. Brownhill	10	6		Edwards, Miss M.	5	0	
Smith, Wm. B.	1	1	0	Failsworth U.D.C.	2	2	0
*Stead, G. W.	10	0	0	Farnworth Corporation	3	3	0
Thompson, Mrs. H. I.	10	6		Fildes, Mrs. A.	10	6	
Waldie, J. & Sons, Ltd.	1	1	0	FitzGerald, Miss M.	10	6	
Wightman, Mrs. U. N.	10	6		Forrester, R. E.	1	0	0

Division 2—Northern Ireland

Young, Miss A. C.	10	0	
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Division 3—North-West

Abram U.D.C.	2	2	0	Gaskell, J.	10	6	
Accrington Corporation (1947)	2	2	0	Gavaghan, Mrs. L. A.	10	6	
(1948)	3	3	0	Glossop Corporation	2	2	0
*Aitkenhead, Miss M.	15	6		Gregory, J.	1	0	0
				Griffiths, The Misses	10	0	
				Hale U.D.C.	2	2	0
				Hancock, A.	1	1	0
				Hardy, G. & Co.	2	2	0
				Hartley, G. E.	10	6	
				Hay, Dr. John	1	1	0
				Hayhurst, Mr. H. and Mrs. L.	1	1	0
				Herbert, J. L.	10	6	

	£	s.	d.
Herford, Miss A. C.	10	6	
Hetherington, H.	10	6	
Heywood Corporation Gas Dept.	1	1	0
Hillier, Miss E. M.	1	1	0
Horwich U.D.C.	2	2	0
Hutchison, Col. R. (1947)	10	6	
" " (1948)	10	6	
Hyde Corporation	3	3	0
Hyde, Fred	1	1	0
Irlam U.D.C.	2	2	0
Jackson, C. L.	1	1	0
Johnson, W. A.	10	6	
Johnston, S.	5	0	
Kay, Miss D.	5	0	
Keddie, Dr. J. T. Chalmers	10	6	
Lancashire and District Coke Association	10	10	0
Lancaster Corporation	3	3	0
Lancashire County Council	26	5	0
Lane, Mrs. W.	10	6	
Langford, A. S.	10	6	
Lee, Sir Kenneth	1	1	0
Lees, Miss M.	1	1	0
Leigh Corporation	3	3	0
Littleborough Gas Co.	1	1	0
Littleborough U.D.C.	2	2	0
Liverpool Corporation	26	5	0
Liverpool Gas Co.	10	10	0
Luscombe, Mr. B. L.	10	6	
Macclesfield Corporation	3	3	0
MacWilliam, Dr. H. H.	10	6	
Manchester Corporation	26	5	0
Manchester District Assoc. of Gas Engineers—			
(1947)	2	2	0
(1948)	2	2	0
Manchester Electricity Dept.	10	10	0
Manchester Corporation Gas Dept.	10	10	0
Manchester & Dist. Smoke Abatement Com.	10	10	0
Marple Gas Dept.	1	1	0
Marple U.D.C.	2	2	0
Mather, L. E.	2	2	0
Mather, W. L.	10	6	
Mather & Platt Ltd.	10	10	0
Matthews, W.	1	0	0
McKellen, N.	1	1	0
Melland, Will	4	2	0
Melland, Mrs. W.	1	1	0
Metro-Vickers Electricity Co., Ltd.	6	6	0
Middleton Corporation	3	3	0
Middlewich Gas, Light and Coke Co.	2	2	0
Mitchell, L. A.	1	1	0
Morrison, Dr. John	1	1	0
Mossley & Saddleworth Gas Co.	3	3	0
Nantwich Gas Co., Ltd.	2	2	0
Nantwich U.D.C. (1947)	2	2	0
" " (1948)	2	2	0
Nelson Corporation	3	3	0
Newton-le-Willows U.D.C.	2	2	0
Oldham Corporation	10	10	0
Oldham Gas Dept.	5	5	0
Oliver, P. M.	1	1	0
Ormskirk U.D.C.	2	2	0
Orr, J. H.	10	6	
Packer, S. H.	10	6	
Pear, Mrs. C.	10	6	
Pike, Miss I. M.	10	6	
*Polding, W. W.	10	6	
Pollard, J.	1	1	0
Pontefract Bros.	2	2	0
*Prest, J.	1	0	
Preston Corporation	10	10	0
Preston Gas Co.	1	1	0
Radcliffe Corporation	2	2	0
Redfern, P.	10	6	
Refuge Assurance Co.	10	10	0
Reynolds, Miss M.	10	6	
Rhyl U.D.C.	2	2	0
Richards, Mrs. E.	5	0	
Robinson, Alderman J.	1	0	0
Rochdale Corporation	5	5	0
Royton U.D.C.	2	2	0
St. Helen's Corporation	10	10	0
Sale Corporation	3	3	0
Salford Gas Committee	10	10	0
Sandbach, Miss E. A.	10	6	

	£	s.	d.
Scott, Mrs. A. O.	10	0	
Shaw, Mrs. M.	10	6	
Simon of Wythenshawe, Lord	2	2	0
Simon Carves Ltd.	5	5	0
*Smith, Herbert	5	5	0
Southport Corporation	1	1	0
Stacey, F. E.	1	1	0
Stockport Corporation	10	10	0
Stretford Corporation	4	4	0
Stretford & District Gas Board	10	10	0
*Swale, W. E.	10	6	
Swinton & Pendlebury Corporation	3	3	0
Taylor, H. F.	12	6	
Taylor, Miss M. R.	10	0	
Tootal, Broadhurst, Lee & Co., Ltd.	5	5	0
Unsworth, J.	10	6	
Urmston U.D.C.	4	4	0
Wallasey Corporation	5	5	0
Walton, T.	1	1	0
Warrington Corporation	5	5	0
Wells, Dr. N. H.	5	0	
West's Gas Improvements Co.	10	10	0
Whiston R.D.C.	1	1	0
Widnes Corporation	3	3	0
Wigan Corporation	5	5	0
Wilmslow U.D.C.	2	2	0
Workington Corporation	3	3	0
Wrexham Corporation	5	5	0
Young, J. W.	1	1	0

Division 4—North-East

Angus, Col. E. G.	3	3	0
Baker, G. M.	10	0	
Berwick-on-Tweed Corporation	2	2	0
Billingham U.D.C.	2	2	0
Blaydon U.D.C. (1947)	3	3	0
" " (1948)	3	3	0
Brandon and Byshottles U.D.C.	2	2	0
Callar, Dr. S.	10	6	
Chester-le-Street R.D.C.	2	2	0
Chester-le-Street U.D.C.	2	2	0
Darlington Corporation (1947)	5	5	0
" " (1948)	5	5	0
Durham R.D.C.	1	1	0
Easington R.D.C.	5	5	0
Eston U.D.C.	3	3	0
Felling U.D.C.	2	2	0
*Gandy, Mr. and Mrs. H.	1	10	0
Gateshead Corporation	10	10	0
Green, Miss E.	10	6	
Hartlepool Corporation	2	2	0
Hartlepool Gas & Water Co.	5	5	0
Hetton U.D.C.	2	2	0
Hexham Gas Company	2	2	0
Houghton le Spring U.D.C.	3	3	0
Imperial Chemical Industries Ltd. (Billingham			
Division)	10	10	0
Lanchester R.D.C.	2	2	0
Newburn U.D.C. (1947)	2	2	0
" " (1948)	2	2	0
Newcastle and Gateshead Gas Co.	10	10	0
Newcastle-upon-Tyne Corporation	15	15	0
Power Gas Corporation Ltd.	5	5	0
Sedgefield R.D.C.	3	3	0
South Shields Corporation (1947)	10	10	0
" " (1948)	10	10	0
Stanley (Co. Durham) U.D.C.	4	4	0
Sunderland Corporation	10	10	0
Washington U.D.C.	2	2	0
West Hartlepool Corporation	4	4	0
Whickham U.D.C.	2	2	0
Whitley Bay U.D.C.	1	1	0

Division 5—Yorkshire

Adwick-le-Street U.D.C.	2	2	0
Aireborough U.D.C.	3	3	0
Ambler, T. & Sons	1	1	0
Batley Corporation	1	1	0
Bentley-with-Arksey U.D.C.	2	2	0
Bingley U.D.C.	2	2	0
Bonner, J. R.	5	0	

	£	s.	d.
Bradbury, D. J.	10	6	
Bradford Corporation Health Dept.	15	15	0
Bradford Civic Society	1	1	0
Bradford Gas Department	10	10	0
Bray, Geo. & Co.	10	10	0
Briddington Corporation	2	2	0
Brighouse Corporation	3	3	0
Brighouse Gas Committee	10	10	0
Brown, G. L.	2	2	0
*Carpenter, V. A.	10	6	
Castleford U.D.C.	3	3	0
Clayton, Son & Co., Ltd.	2	2	0
Clegg, E.	10	6	
Coke Oven Managers' Association	5	5	0
Colne Valley U.D.C.	2	2	0
Conisborough U.D.C.	2	2	0
Dearne U.D.C.	2	2	0
Dewsbury Corporation	4	4	0
Doncaster Civic Trust	2	0	0
Doncaster Corporation	4	4	0
Elland-cum-Greetland Gas Co.	2	2	0
Elwell, Mrs. E.	10	6	
Goldstern, W.	10	6	
Goodfellow, J. (Jan.)	10	6	
" (May)	10	6	
Halifax Corporation	5	5	0
Harrogate Corporation	3	3	0
Hemsworth R.D.C.	3	3	0
Holmes, W. C. & Co., Ltd.	10	10	0
*Holmes, W. G.	2	10	0
Huddersfield Corporation	10	10	0
Hull Corporation	15	15	0
Johnstone Jarvis, Dr. J.	10	6	
Keighley Corporation	3	3	0
Jones, G. (1947)	10	6	
" (1948)	10	6	
Leeds Corporation	15	15	0
Leeds Electricity Dept.	10	10	0
Leeds Gas Department	25	0	0
Lister, H. & Sons, Ltd.	2	2	0
Marrinan, Miss E. M.	10	6	
Marshall, G. C.	5	0	
Mexborough U.D.C.	2	2	0
Micklethwait, R. G.	10	0	
Mirfield U.D.C.	2	2	0
Morley Corporation	3	3	0
Morton, Mrs. D. F.	10	6	
Osborne, Dr. H.	1	1	0
Pontefract Corporation	2	2	0
Pudsey Corporation	3	3	0
Raymarsh U.D.C.	2	2	0
Redcar Corporation	2	2	0
Reeder, E. C.	10	6	
*Reif, A. E.	1	1	0
Robertson, G. W.	1	1	0
Rothwell U.D.C.	2	2	0
Scarborough Corporation	2	2	0
Scarborough Gas Company	3	3	0
*Severs, J. S.	1	0	0
Sheffield and District Gas Co.	10	10	0
Sheffield, Rotherham and District Smoke Abatement Committee	31	10	0
Shipley U.D.C.	3	3	0
Spenborough U.D.C. Gas Dept.	3	3	0
Squires, E.	10	6	
Stocksbridge U.D.C.	2	2	0
Swinton U.D.C.	2	2	0
*Turner, T. Henry	10	6	
Wakefield Corporation	5	5	0
Warwick, H.	10	6	
Webb, R. N.	1	1	0
West Riding Group of Gas Companies	10	10	0
West Riding of Yorkshire Regional Smoke Abatement Committee—			
(1947)	2	2	0
(1948)	2	2	0
Wood, F. T.	10	6	
York Corporation	5	5	0
York, Harrogate and District Group of Gas Companies—			
(1947)	14	14	0
(1948)	14	14	0
Yorkshire Electric Power Co.	10	10	0
Yorkshire Gas Coke Association	25	0	0

Division 6—West Midlands

	£	s.	d.
Adler, Dr. S.	1	1	0
Allday, Wm. & Co., Ltd. (1947)	1	1	0
" " " (1948)	1	1	0
Barrow, H.	5	0	
Best, J. K.	10	6	
Bilston Corporation	5	5	0
Birmingham Corporation	26	5	0
Birmingham Gas Dept.	5	5	0
Brierley Hill U.D.C.	3	3	0
Burton-upon-Trent Corporation	3	3	0
Cannock District Gas Co.	3	3	0
Cannock U.D.C.	3	3	0
Collier, R. D.	10	6	
Coventry Corporation	10	10	0
Darlaston U.D.C.	2	2	0
Derby Corporation	1	1	0
Dudley Corporation (1947)	4	4	0
" (1948)	4	4	0
Halesowen Corporation	3	3	0
Harris & Co., Ltd.	1	11	6
Hayes, Mrs. A. L.	10	6	
Herbert, A., Ltd.	1	1	0
Iron Bridge and District Gas Co.	2	2	0
Johnson, R.	10	6	
Kidderminster Corporation	3	3	0
Kidsgrave Gaslight Co.	3	3	0
Ludlow Union Gas Co., Ltd.	2	2	0
Malpas Gas Co., Ltd.	1	1	0
Manger's Salt Works Ltd.	10	6	
Market Drayton Gas Co.	2	2	0
Meriden R.D.C. (Jan., 1948)	3	3	0
" (June, 1948)	3	3	0
Midlands Joint Advisory Council for Smoke Abatement	2	2	0
Newcastle-under-Lyme Corporation	4	4	0
Oldbury Corporation	3	3	0
Radiation Ltd.	10	10	0
Redditch Gas Company	10	10	0
Rowley Regis Corporation	5	5	0
Rugeley Gas Co.	2	2	0
Rugby Corporation	3	3	0
Sedgley U.D.C.	2	2	0
Shrewsbury Corporation	3	3	0
Shrewsbury Gas Light Co.	10	10	0
Smart, R. Cecil	5	0	
Smethwick Corporation	5	5	0
Solihull Gas Co.	1	1	0
Solihull U.D.C.	4	4	0
Stafford Corporation	1	1	0
Staffordshire County Council	26	5	0
Stoke-on-Trent Corporation	15	15	0
Stoke-on-Trent Gas Dept.	10	10	0
Stone Gas Light & Coke Co.	2	2	0
Stone R.D.C.	2	2	0
Stourbridge Gas Dept.	1	1	0
Stourport Gas Co.	3	3	0
Tamworth Gas Light & Coke Co.	3	3	0
Trezeise, Wm. E.	1	1	0
Utttoxeter Gas Works Ltd.	2	2	0
Wall, John M. Ltd.	1	1	0
Walsall Corporation	10	10	0
Wednesbury Corporation	3	3	0
Wellington (Salop) Gas Co.	10	10	0
Wem Gas Light & Coke Co.	1	1	0
West Bromwich Corporation	5	5	0
Whitchurch (Salop) Gas Co.	2	2	0
Willenhall U.D.C.	3	3	0
Wolverhampton Corporation	10	10	0
Wolverhampton Gas Co.	5	5	0

Division 7—East Midlands

Blackwell R.D.C.	3	3	0
Bolsover U.D.C.	2	2	0
Boston Corporation	2	2	0
Cambridge Corporation	1	1	0
Cambridge University & Town Gas Light Co.	10	10	0
Charlesworth, Mrs.	5	0	
Chesterfield Corporation	4	4	0
Clarke, J. A.	1	0	0
Clarke, Dr. R. T. V.	10	6	
Coote & Warren Ltd.	1	1	0

	£	s.	d.
Corrin, H. R.	10	6	
Dearden, John	10	6	
Fry, Miss A. R.	1	1	0
Great Grimsby Gas Co.	2	2	0
Great Yarmouth Gas Co.	4	4	0
Grimsby Corporation	5	5	0
Gurney, John	2	2	0
Heanor U.D.C.	4	4	0
Hinckley U.D.C.	3	3	0
Ipswich Gas Light Co.	10	10	0
King's Lynn Corporation	2	2	0
Kirkby-in-Ashfield U.D.C.	2	2	0
Kirman, H. H.	10	6	
Leicester Corporation	15	15	0
Leicester Gas Dept.	3	3	0
Leominster Gas & Coke Co., Ltd.	2	2	0
Lincoln Corporation	5	5	0
Long Eaton Gas Co.	10	10	0
Lowestoft Water & Gas Co.	2	2	0
Market Harborough U.D.C.	2	2	0
McHugh, F. G.	5	0	
Melton Mowbray Gas Light & Coke Co., Ltd.	3	3	0
Messenger, Cllr. Mrs. R., J.P.	10	6	
Nottingham Corporation	15	15	0
Pearson, Dr. S. Vere	1	0	0
Peterborough Corporation	4	4	0
Rushden U.D.C. (1947)	2	2	0
" (1948)	2	2	0
Staveley U.D.C.	2	2	0
Swadlincote District U.D.C.	2	2	0
Uppingham Gas Light & Coke Co.	1	1	0
Winsford Gas Co., Ltd.	2	2	0
Worksop Corporation	3	3	0
Wright, J.	1	1	0

Division 8—South-West

Abercam U.D.C.	2	2	0
Abertillery U.D.C.	3	3	0
Bath Corporation	4	4	0
Bidford-on-Avon Gas Co., Ltd.	1	1	0
Blaenavon U.D.C.	2	2	0
Bradshaw, Miss G.	5	0	
Bristol Corporation	15	15	0
Bristol and District Regional Smoke Abatement Council—			
(1947)	2	2	0
(1948)	2	2	0
Bristol Gas Company	5	5	0
Bromyard Gas Co., Ltd.	1	1	0
Brynmaur and Blaina Gas Co.	1	1	0
Caldicot and District Gas Light & Coke Co., Ltd.	2	2	0
Campbell, Dr. A. F.	1	1	0
Campan Gas Co., Ltd.	2	2	0
Cardiff Corporation	10	10	0
Cardiff Gas Light & Coke Co.	10	10	0
Cardiff R.D.C.	3	3	0
Cawley, The Lady	1	0	0
Cheltenham Corporation	4	4	0
Cheltenham and District Gas Co.	10	10	0
Chepstow Gas Co.	2	2	0
Clevedon U.D.C.	2	2	0
Coulthurst, Mrs. A.	10	6	
Cwmbran U.D.C.	2	2	0
Ebbw Vale U.D.C.	3	3	0
Exeter Gas Light & Coke Co.	10	10	0
Fry, Miss A.	10	6	
Gas Consolidation Ltd.	10	10	0
Gloucester Corporation	4	4	0
Gloucester Gas Light Company	5	5	0
Hereford Corporation	3	3	0
Merthyr Tydfil Corporation	4	4	0
Monmouth Gas & Water Works Co., Ltd.	2	2	0
Morgan, D. & Sons	1	1	0
Mynyddislwyn U.D.C.	2	2	0
Neath Corporation	3	3	0
Newport Corporation	5	5	0
Newport (Mon.) Gas Co.	10	10	0
Pontypridd U.D.C.	3	3	0
Portishead U.D.C.	2	2	0
*Rogers, P.	2	2	0
*Sanger, Mrs. A. D.	1	0	0

	£	s.	d.
Seale, Mrs. I. L.	10	6	
Severn Valley Gas Corp. Ltd.	10	10	0
Shaftesbury, Lady	10	6	
Silburn, Mrs. E.	10	6	
Stroud Gas Light & Coke Co.	3	3	0
Swansea Corporation	2	2	0
Swindon Corporation	4	4	0
Swindon United Gas Company	5	5	0
Thornbury R.D.C.	2	2	0
Tredegar U.D.C.	2	2	0
Wales and Monmouthshire Association of Gas Engineers and Managers	1	1	0
Welshpool Gas Co., Ltd.	1	1	0
Weston-super-Mare Corporation	2	2	0
Weston-super-Mare and District Gas Company	1	1	0

Division 9—South-East

Acton Corporation	4	4	0
Acworth, A. W.	10	6	
Acworth, Miss E. A.	1	1	0
Acworth, Miss W. B.	2	2	0
Alston, Dr. J. M.	1	1	0
Andover Lighting and Power Co.	2	2	0
Ascot District Gas and Electricity Co.	2	2	0
Ascot Gas Water Heaters Ltd.	10	10	0
Associated Gas and Water Undertakings Ltd.	10	10	0
Atkinson, Mrs. M.	1	0	0
Averill, C. R., Ltd.	1	1	0
Bakelite Ltd.	2	2	0
Banbury Borough Council	2	2	0
Banbury Gas Light & Coke Co.	1	1	0
Barber, S. S.	10	6	
Barking Corporation (1947)	4	4	0
" (1948)	5	5	0
Barnes Corporation	3	3	0
Bastian & Allen Ltd.	2	2	0
Battersea Corporation	10	10	0
Beard, J. R.	1	1	0
Bennett, M. J.	1	0	0
Bermondsey Corporation	4	4	0
Berry, Dr. J. A.	1	1	0
Bexley Corporation	5	5	0
Binderman, Mrs. A.	5	5	0
Blacker, E.	10	6	
Bligh, Mrs. M. F.	10	0	
Bognor Gas & Electricity Co.	1	1	0
Bonston, T. L.	10	6	
Bournemouth Corporation	2	2	0
Bournemouth Gas & Water Co.	2	2	0
Braidwood, G. L.	10	6	
Brighton Corporation	10	10	0
Brighton, Hove and Worthing Gas Company	5	5	0
British Electrical and Allied Manufacturers' Association	10	10	0
British Electrical Development Association	100	0	0
British Gas Council	262	10	0
British Medical Association	10	10	0
Broadstairs Gas Company	1	1	0
Buzzacott, J. O.	2	2	0
Cable Makers' Association	10	10	0
Camberwell Corporation	10	10	0
Capper-Johnson, Dr. L.	10	6	
Carshalton U.D.C.	1	1	0
*Chantler, P.	2	2	0
Charrington, Gardner, Locket & Co., Ltd.	5	5	0
Chatham Corporation	3	3	0
Chelmsford Corporation	3	3	0
Chelsea Corporation	3	3	0
Chertsey Gas Consumers' Co., Ltd.	2	2	0
Chingford Corporation (1947)	1	1	0
" (1948)	2	2	0
Chislehurst and Sidcup U.D.C.	4	4	0
Clarke, D.K.	10	6	
Clinch, H. G.	10	6	
Coal Utilization Joint Council	10	10	0
Collier, Dr. W. A. L.	10	6	
Commercial Gas Company	3	3	0
Crayford U.D.C.	2	2	0
Crow, R. K.	10	6	
Croydon Gas Company	10	10	0
Dagenham Corporation	2	2	0
Dartford Corporation	3	3	0

	£	s.	d.		£	s.	d.
Dartford R.D.C.	3	3	0	Luton Corporation	2	2	0
Darwen, J.	1	1	0	McGhie, A. T. S.	10	6	
Deal and Walmer Gas Company	1	1	0	Maidenhead Corporation	3	3	0
Dormer, A. E.	8	6		Maidstone Gas Company	3	3	0
Dover Gas Company	3	3	0	Malden and Coombe Corporation	3	3	0
Eastbourne Gas Company	2	2	0	Margolis, A. E.	10	6	
East Cowes Gas Company	1	1	0	Markham, Major S. F.	1	1	0
East Ham Corporation	10	10	0	Mathias, J.	1	1	0
East Kent Gas Company	1	1	0	Matthews, Mrs. M.	10	6	
Edmonton Corporation	5	5	0	*McLachlan, T.	10	6	
Edwards, Mrs. E. E.	10	6		Melland, B.	1	1	0
Electrical Association for Women	10	10	0	Merton and Morden U.D.C.	4	4	0
*Elsworthy, J. G.	1	11	6	Mid-Kent Gas Light & Coke Co.	1	1	0
Enfield U.D.C.	1	1	0	Mitcham Corporation	2	2	0
Erith Corporation	3	3	0	Morgan, Miss G.	10	6	
Eton R.D.C.	3	3	0	Nonhebel, G.	1	1	0
Farnborough U.D.C.	2	2	0	North Middlesex Gas Co.	10	10	0
Feltham U.D.C.	3	3	0	Oxford Corporation	10	10	0
Finchley Corporation	4	4	0	Oxford and District Gas Co.	2	2	0
Finsbury Corporation (Nov.)	4	4	0	Oxford Preservation Trust	1	1	0
" " (Dec.)	4	4	0	Paddington Corporation	5	5	0
Folkestone Gas & Coke Company	2	2	0	Parkinson, B. R.	7	6	
*Foss, Mrs. A.	10	6		*Pitman, E.	1	0	0
Fox, F.	10	0		Portsmouth Corporation	2	2	0
Fry, Miss M.	1	0	0	Portsmouth and Gosport Gas Co.	1	1	0
Fulham Corporation	10	10	0	Pratt, A. G.	10	6	
Gandy, Miss R.	10	6		Ratcliffe, J. S.	1	1	0
Gas Light & Coke Company	52	10	0	Rathbone, P. R.	10	6	
General Electric Co., Ltd.	10	10	0	Reading Corporation	10	10	0
Gillison, Dr. J. A.	1	1	0	Reigate Corporation	1	1	0
Goodchild, C. R.	10	6		Rheostatic Co., Ltd.	1	1	0
Goodeve, Sir C. F.	1	1	0	Rhondda, Lady	10	6	
Gosport Corporation	2	2	0	Richards, Dr. H.	10	6	
Graucob, F. Ltd.	2	2	0	Richmond, A. C.	10	6	
Gravesend Corporation	3	3	0	Richmond Corporation	3	3	0
Gravesend and Milton Gas Light Co.	2	2	0	Roberts, J. M.	10	6	
Greenwich Corporation	2	2	0	Robinson, Mrs. E.	2	2	0
Greenwood, T. A. S.	10	0		Rochester, Chatham and Gillingham Gas Co.	10	10	0
Guildford Corporation	5	5	0	Ryan, J.	10	6	
Gummer, R. H.	1	1	0	St. Albans Corporation	3	3	0
Hackney Corporation	10	10	0	St. Marylebone Corporation	5	5	0
Hammersmith Corporation	10	10	0	St. Pancras Corporation	5	5	0
*Hampson, G. B.	10	6		Samuel, Viscount and Lady	1	1	0
Hampstead Corporation	5	5	0	Sanitary Inspectors' Association	10	10	0
Harrow U.D.C.	10	10	0	Sempill, Lord	1	1	0
Hastings and St. Leonards Gas Co.	3	3	0	Sempill, Lady	1	1	0
Herne Bay Gas Company	1	1	0	Sheppey Gas Company	2	2	0
Hessle Gas Company	2	2	0	Shore, Lt.-Col. B. C. G.	10	6	
Heston and Isleworth Corporation	5	5	0	Shoreditch Corporation (1947)	3	3	0
Hodgkinson, J. (Salford) Ltd.	5	5	0	" " (1948)	3	3	0
Holborn Corporation	2	2	0	Sittingbourne District Gas Co.	1	1	0
Hopthorpe, Brig. H. E.	10	6		Slough Corporation	3	3	0
Horde, Lord	5	5	0	Smith, D. V. H.	1	1	0
Hornchurch U.D.C.	3	3	0	Smith, Sir Ernest	2	2	0
Hyland, A.	10	6		Smith & Wellstood Ltd.	1	1	0
Ideal Boilers and Radiators Ltd.	5	5	0	Solid Smokeless Fuels Federation	10	10	0
Ilford Corporation	10	10	0	South Eastern Gas Corporation Ltd.	10	10	0
Institute of Fuel	10	10	0	Southall Corporation	3	3	0
Institution of Electrical Engineers	26	5	0	Southampton Corporation	1	1	0
Institution of Heating & Ventilating Engineers	10	10	0	Southampton Gas Light & Coke Co.	10	10	0
Jast, Mrs. L. S.	10	6		Southend-on-Sea Corporation	10	10	0
Kemp, F. W.	10	6		South Suburban Gas Company	10	10	0
Kensington Corporation	1	1	0	Southwark Corporation (1947)	5	5	0
Kingston-upon-Thames Corporation	3	3	0	" " (1948)	5	5	0
Kirkman, Mrs.	1	1	0	Southwell, W. E.	10	6	
Kisbee, R. H.	10	6		Southwick U.D.C.	2	2	0
Lambeth Corporation	1	1	0	Stepney Corporation	4	4	0
Lea Bridge and District Gas Company	10	10	0	Sturtevant Engineering Co., Ltd.	2	2	0
Lee, S. A.	10	6		Sutton and Cheam Corporation (1947)	5	5	0
*Lessing, Dr. R.	1	1	0	" " (1948)	5	5	0
Letchworth U.D.C.	2	2	0	Thurrock U.D.C.	4	4	0
Leveson Gower, Miss V.	5	0		Tiranti, A.	5	0	
Lewin, Dr. O. M. S.	1	1	0	Tottenham and District Gas Co.	10	10	0
Lewisham Corporation	10	10	0	Trier, F. Newton	1	1	0
Leyton Corporation	5	5	0	Uxbridge, Maidenhead, Wycombe and District Gas Co.	10	10	0
Liptak Furnace Arches Ltd.	2	2	0	Uxbridge U.D.C.	3	3	0
Lister, B. S. (1947)	1	0	0	Vaughan-Cowell, Lt.-Col. A.	1	1	0
" (1948)	1	0	0	Des Voeux, Mrs. M. A.	5	5	0
London and Counties Coke Association	52	10	0	*Wadham, Miss D.	1	0	0
London, Corporation of	26	5	0	Walthamstow Corporation	10	10	0
London Electricity Supply Association	2	12	6	Wandsworth and District Gas Co.	10	10	0
London Power Co.	2	2	0	Wandsworth Corporation	5	5	0
Low Temperature Carbonisation Ltd.	15	15	0				

	£	s.	d.
Wanstead and Woodford Corporation	4	4	0
Ward, Dr. F. A. B. ...	2	2	0
Watford Corporation ...	2	2	0
Wembley Corporation ...	10	10	0
Westminster City Council ...	15	15	0
Whitstable Gas and Coke Co. ...	1	1	0
White, Dr. H. D. J. ...	10	6	
Wicksteed, J. H. ...	10	0	
Willesden Corporation ...	10	10	0
Wimbledon Corporation ...	4	4	0
Windsor Corporation ...	2	2	0
Windsor R.D.C. ...	2	2	0
Women's Advisory Council on Solid Fuel ...	5	5	0
Women's Gas Council ...	10	10	0

	£	s.	d.
Women's Gas Council, Cheltenham ...	10	0	
Woodall-Duckham Vertical Retort Ltd. ...	10	10	0

Overseas Subscriptions

Hebley, H. F. (U.S.A.) ...	1	5	0
Jaffray, F. A. (Southern Rhodesia) ...	2	10	0
Keene, C. E. (Jersey, C.I.) ...	1	1	0
Vereeniging Town Council (S.A.) ...	1	1	0

Subscriptions and donations under 5s. ...	8	6	
	£3398	4	6

Information about the Society

The forerunners of the Society were the Coal Smoke Abatement Society, established in London in 1899, and the Smoke Abatement League of Great Britain (1909), which was concerned mainly with the Provinces. The two bodies amalgamated in 1929 to form the present Society. In 1945 its growth and increasing influence made necessary a new constitution to which reference should be made for further information about membership, officers, Executive Council and Committees, etc.

Divisions

For electoral purposes and, where it is desired, area organization, the Society is now composed of the following geographical Divisions: (1) Scotland, (2) Northern Ireland, (3) North West, (4) North East, (5) Yorkshire, (6) West Midlands, (7) East Midlands, (8) South West, (9) South East. (See Constitution for the counties in each Division).

Membership

The Society is wholly dependent on the contributions of its members for the maintenance and growth of its work, and invites the support of all who sympathize with and wish to promote its objects. These, to quote from the Constitution, are "to secure throughout the United Kingdom the maximum of natural light and air free from every form of pollution, and particularly that arising from the combustion of fuel."

There are four classes of membership—for individuals, local authorities, institutions and corporate bodies such as firms and public undertakings. Particulars of membership are given on the next page.

Individual members and the representatives of other members have rights of nomination and voting in elections for Officers and Council. They receive, free of charge, the Society's quarterly journal *SMOKELESS AIR*, and other publications. They are entitled to receive assistance and information on problems relating to smoke abatement. In addition to receiving notices of meetings and conferences organised nationally, they are entitled to participate in any activities organized by or in their own Division.

Associates

Any individual, local authority, institution or corporate body contributing less than the appropriate membership subscription may become an *Associate*, entitled to some of the privileges of membership, but not to those relating to nomination, voting and election to office.

Subscriptions

INDIVIDUAL MEMBERS—Not less than 10s. 6d. a year.

LOCAL AUTHORITY MEMBERS—Not less than the following amounts, according to populations :

Less than 25,000	...	...	...	2 guineas
25,000 to 50,000	...	...	...	3 "
50,000 to 75,000	...	...	...	4 "
75,000 to 100,000	...	...	...	5 "
100,000 to 250,000	...	...	...	10 "
250,000 to 500,000	...	...	...	15 "
Over 500,000	...	...	...	25 "

INSTITUTION MEMBERS (which includes Societies, Associations and Groups) *and*

CORPORATE MEMBERS (which includes Companies, Firms, and Departments of Local Authorities)—Not less than 10 guineas for members appointing two Representatives; not less than 5 guineas for members appointing one Representative.

SPECIAL CASES—The Executive Council may consider applications for membership on special terms as to subscriptions and otherwise. This rule is intended to apply in particular to local and other small voluntary associations wishing to become Institution Members.

ASSOCIATES—Any sum that is less than the appropriate subscription for membership.

DONATIONS—The Society will be pleased to receive single or annual donations for any amounts from non-members.

PUBLICATIONS—Annual subscriptions may be made for "Smokeless Air" and for other publications as issued.

PAYMENT OF SUBSCRIPTIONS—The first subscription should be forwarded with application for membership. This may be sent at any time, and the subscription remains in force until the first day of the corresponding month of the following year. It is mutually advantageous if subscriptions are made by Banker's Order.

Representatives

Local Authority, Institution and Corporate Members are entitled to appoint Representatives to exercise on their behalf the rights of members as regards nomination for office, voting, and receipt of publications, etc. Institution and Corporate Members may appoint one or two representatives each, and Local Authority Members a number according to population, as follows :

Less than 100,000	...	...	...	...	2
100,000 to 250,000	...	...	...	...	3
250,000 to 500,000	...	...	...	...	4
500,000 and over	...	...	...	...	5

The names and addresses of Representatives should be forwarded on making application for membership, so that they may be entered in the Voting Registers.

Services to Members

Information and Advice

Members may obtain, free of charge, advice, assistance, and information on matters relating to atmospheric pollution and its prevention, provided that, where necessary, the request is approved by the Executive Council.

Library

The Society possesses an extensive collection of books, reports and pamphlets, British and foreign, on atmospheric pollution and related subjects, with bound annual volumes of Press cuttings. Copies may be borrowed or consulted by arrangement.

Lectures

The Society will be pleased to help members and others to arrange lectures and talks of all kinds in any part of the country on atmospheric pollution and related subjects.

Lantern Slides

A collection of lantern slides is available and slides may be borrowed at a charge of 1d. per slide per lecture, plus registered postages.

Films

The Society does not at present possess films of its own but will be glad to suggest appropriate films that may be available from other sources.

Exhibits

The Society is prepared to consider participating in exhibitions and has material available on loan. Inquiries should be made as early as possible in advance and should give full details of requirements. In view of transport and packing difficulties material can be loaned more conveniently if it can be collected from and returned to Chandos House by car or van. Carriage costs are charged where material is sent by public transport.

Posters

The following posters are available : (1) Set of pictorial and letterpress posters designed for use on ex-E.M.B. frames, but can be used singly. Price 2s. 6d. per set. (2) New prize-winning photo-colour poster, 30 in. x 20 in. Price 6d. each. (3) New pictorial chart primarily for school use, "These are the Things that Smoke Does," 30 in. x 20 in. Price 6d. Reduced prices for quantities. Posters may be supplied free of charge in appropriate cases.

Literature

Inquiries are invited on the supply of publications, give-away leaflets, etc., for special purposes. Particulars of the Society's "Guide to Publications" will be found on another page.

Photographs

The Society has a classified and indexed collection of smoke and other photographs, comprising over 250 subjects and suitable for reproduction and/or exhibition purposes. Prints may be inspected or selections sent by post if details of requirements are given. Reproduction fees, where chargeable, are at standard rates.

New photographs of high pictorial quality, with reproduction rights, are required either as gifts or for payment at standard rates.

The Covenant Subscription Scheme

Particulars of the scheme that enables you to increase, without extra cost, the benefit of your subscription to the Society. We invite you to consider it.

For the purpose of the scheme the Society is recognised as a “charity” by the Commissioners of Inland Revenue, and it may claim for its own use the amount of the income tax that has been paid on the subscriptions it receives, provided that the subscriber has signed an agreement to subscribe a stated sum annually for a period of at least seven years.

Thus, if a member agrees to subscribe £5 a year, this amount is considered as what remains after a larger gross sum has been taxed, and the Society is able to claim the difference. With income tax at 9s. in the £ the gross amount is £9 1s. 10d., and the Society thus receives £4 1s. 10d. from the authorities. The benefit to the Society is thus nearly doubled at no further cost to the subscriber. A lower rate of tax would reduce the amount so recovered, but an increased benefit to the Society remains.

The only obligation into which the subscriber enters in order to assist the Society in this way is to covenant to continue the subscription for a minimum period of seven years, or during his life, whichever period should be shorter.

After the covenant has been signed the subscriber is not required to take any further action other than duly forwarding his annual subscription (or more conveniently paying it by Banker’s

Order) and signing an Inland Revenue certificate which will be sent to him each year by the Society, to the effect that the subscription has in fact been paid and has been drawn from his “general fund of taxed income.” The certificate will show the gross amount from which tax has been deducted, and the subscriber will be entitled to show such gross amount as a “charge” in his return of income for tax purposes, an advantage some will appreciate.

A specimen form of covenant is given below. Such a document may be prepared on plain paper by the subscriber, and, after being signed and witnessed, sent to the Society. If preferred, the Society will prepare and forward a document on receipt of the particulars required (*i.e.*, name in full, address in full, description or occupation, and the amount to be paid annually to the Society). The required stamping of the document will be attended to by the Society.

It will be noted that the gross amount concerned varies according to the rate of income tax, but that the sum that the subscriber pays direct to the Society does not alter. It is this sum that is stated in the covenant.

The specimen is in the form required by individuals, but corporate bodies will no doubt be able to modify it as may be required.

SPECIMEN OF COVENANT

I (name) of
(address) (description or occupation)
HEREBY COVENANT with the National Smoke Abatement Society, of Chandos House, Buckingham Gate, in the City of Westminster, that for a period of seven years from the first day of, 194....., or during my life whichever period shall be shorter, I will pay annually to the said Society such a sum as will after the deduction of income tax at the rate for the time being in force amount to the sum of
(amount in words), such sum to be paid from my general fund of taxed income.
IN WITNESS whereof I have hereunto set my hand and seal this day of 194.....
Signed, sealed and delivered by the said in the presence of
Signature (witness) (Signature)
Address
Occupation

PROCEEDINGS OF THE CHELTENHAM CONFERENCE 1948



"Full of valuable information . . . much in the report makes one hopeful."—*Architect and Building News*.



3s. 6d. By post, 3s. 8d.

GUILTY CHIMNEYS

"Not merely a formidable case against coal smoke but also a most interesting collection of historic and scientific facts relating to the burning of raw coal and its consequences."—*Yorkshire Post*.

"This small but admirable book."—*Aeronautics*.



1s. By post, 1s. 2d.

The LAW of SMOKE NUISANCES

W. R. Hornby Steer

"Those who are desirous of becoming conversant with the problems of the law of smoke abatement could do no better than peruse this splendid book, which deals with the history of the subject, with common law as well as statute law, with shipping, railways and joint action of local authorities."—*Municipal Engineering*.

Cloth, 5s. ; *paper*, 3s.
By post, 5s. 3d. and 3s. 2d.

SMOKE: THE PROBLEM OF COAL AND THE ATMOSPHERE

Arnold Marsh

"The most complete popular account of the smoke problem we have yet seen. The case he makes out for immediate, though gradual and cumulative, action cannot be neglected in any complete policy for the ordered exploitation of our fuel resources."—*Manchester Guardian*.

"Here is the complete picture. Admirably produced with appendices and a full bibliography, *Smoke* is illustrated with a host of quite exceptional photographs."—*Gas Journal*.

(Published by Faber & Faber Ltd.)

21s. By post, 21s. 6d.

The Divisions of the Society



NATIONAL SMOKE ABATEMENT SOCIETY

1950

**OFFICERS * COUNCIL * DIVISIONS * LOCAL
AUTHORITY MEMBERS * INFORMATION**

**SERVICES * 20th ANNUAL REPORT (1949)
SUBSCRIPTIONS * ACCOUNTS * PUBLICATIONS**

MEMBERSHIP OF THE SOCIETY

Full particulars about membership and the organization of the Society are issued separately in an *Information* folder, with membership application and other forms. If you are not yet a Member of the Society and the folder does not accompany this Report, please ask for a copy and for specimen copies of SMOKELESS AIR, the Society's quarterly magazine, and other publications.

See page 20 for general information about membership.

GUIDE TO PUBLICATIONS

A Guide to Publications on Smoke Prevention and Allied Subjects (1950) has been prepared by the Society and is issued separately. Copies may be obtained on application. It contains full particulars of all the available books, reports and pamphlets issued by the Society and other publishers, classified according to subject and with cross-references.

See page 24 for announcements on some recent publications.

National Smoke Abatement Society

1950

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Central Offices

CHANDOS HOUSE, BUCKINGHAM GATE, WESTMINSTER, S.W.1

ABBeY 1359

National Smoke Abatement Society

President : DAME VERA LAUGHTON MATHEWS, D.B.E.

Past Presidents :

The Rt. Hon. LORD SIMON OF WYTHENSHAW, LL.D.

SIR GEORGE ELLISTON, M.C., M.A., J.P., D.L.

WILL MELLAND, M.A., J.P.

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Deputy Chairman : JOHN W. BEAUMONT, F.R.SAN.I., F.S.I.A.

Hon. Treasurer : SIR ERNEST SMITH, C.B.E., D.SC., F.I.C., M.I.CHEM.E., M.I.GAS.E.

Standing Counsel : W. R. HORNBY STEER, M.A., LL.B.

General Secretary and Editor : ARNOLD MARSH, M.SC.TECH., M.INST.F.

Vice-Presidents :

The Rt. Hon. the Viscount Cecil of
Chelwood, P.C., K.C.

The Rt. Hon. the Viscount Samuel,
P.C., G.C.B., G.B.E.

The Rt. Rev. the Lord Bishop of
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M.D.

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J. Johnstone Jervis, M.D., D.P.H.

R. H. H. Jolly, M.D., B.S.(LOND.), D.P.H.

Alderman J. J. Milton

H. Osborne, M.D., M.R.C.S.

Violet Robertson, C.B.E., LL.D., J.P.

Alderman G. J. Timmis, O.B.E., J.P.

Elected Members of the Council

Scottish Division

John Innes

Allan W. Ritchie, M.B.E., F.R.SAN.I.

Bailie Violet Robertson, C.B.E., LL.D.,
J.P.

North Western Division

J. L. Burn, M.D., B.S., B.HY., D.P.H.

J. S. G. Burnett, M.D., D.P.H.

S. N. Duguid, J.P., B.SC.TECH., F.INST.F.,
F.R.SAN.I.

Charles Gandy, B.A.

W. L. Mather, M.C., M.A.

C. Metcalfe Brown, M.D., D.P.H.

Councillor Professor F. E. Tylecote,
M.D.

North Eastern Division

Alderman J. Chapman

Alderman P. S. Hancock, O.B.E.

Yorkshire Division

J. W. Beaumont, F.R.SAN.I., F.S.I.A.

I. G. Davies, M.D., B.S., M.R.C.P., D.P.H.

James Goodfellow, M.R.SAN.I., A.M.I.S.E.

James Law, M.R.SAN.I., M.S.I.A.

West Midlands Division

G. W. Farquharson, M.S.I.A.

W. R. Martine, O.B.E., T.D., M.D., D.P.H.

C. A. Stansbury, M.R.SAN.I., M.S.I.A.

East Midlands Division

F. G. McHugh, M.R.SAN.I.

A. Wade, M.B.E., F.R.SAN.I.

South Western Division

G. W. Dhenin, M.S.I.A., M.R.SAN.I.

F. R. Jefford, F.R.SAN.I., F.S.I.A.

F. J. Redstone, F.R.SAN.I., F.S.I.A.

South Eastern Division

R. A. Baskett, B.E.M., F.S.I.A.

N. Bastable, M.R.SAN.I., F.S.I.A.

H. G. Clinch, F.R.SAN.I., F.S.I.A.

S. R. Daly, B.SC., D.P.A., F.A.L.P.A.

R. Lessing, PH.D., F.R.I.C., F.INST.F.,
M.I.CHEM.E.

J. J. Matthews, M.R.SAN.I.

G. Nonhebel, M.I.CHEM.E., F.R.I.C.,
F.INST.F.

A. J. Shinnie, M.D., D.P.H.

Affiliated Local Authorities

as at 17th February, 1950

Division 1 Scotland

Members

Aberdeen
Airdrie
Ardrossan
Ayr
Clackmannan C.C.
Clydebank
Coatbridge
Dumbarton
Dumbarton C.C.
Dundee
Dunfermline
Edinburgh
Falkirk
Glasgow
Greenock
Hamilton
Hawick
Inverness
Irvine
Jedburgh
Johnstone
Kilmarnock
Kilsyth
Kirkcaldy
Kirkintilloch
Lanark C.C.
Motherwell and
Wishaw
Paisley
Perth
Port Glasgow
Renfrew
Renfrew C.C.
Rothesay
Rutherglen
Stirling C.C.
West Lothian C.C.

Division 3 North West

Members

Abram
Accrington
Ashton-under-
Lyne
Atherton
Barrow-in-Furness

Blackburn
Blackpool
Bolton
Bootle
Burnley
Bury
Buxton
Carlisle
Chadderton
Cheadle & Gatley
Chester
Church
Clitheroe
Crewe
Crompton
Crosby
Darwen
Denton
Droylsden
Eccles
Failsworth
Farnworth
Glossop
Hale
Hazel Grove and
Bramhall
Horwich
Huyton-with-Roby
Hyde
Irlam
Lancashire C.C.
Lancaster
Leigh
Littleborough
Liverpool
Longdendale
Macclesfield
Manchester
Marple
Middleton
Nantwich
Nelson
Newton-le-
Willows
Northwich
Oldham
Ormskirk
Preston
Radcliffe
Rawtenstall
Rhyl

Rochdale
Royton
St. Helens
Sale
Salford
Stalybridge
Stockport
Stretford
Swinton and
Pendlebury
Urmston
Wallasey
Warrington
Widnes
Wigan
Wilmslow
Workington
Wrexham
Wrexham R.D.C.
Associates
Birkenhead
Southport
Whiston

Division 4 North East

Members

Ashington
Bedlingtonshire
Berwick-on-Tweed
Billingham
Blaydon
Brandon and
Byshottles
Chester-le-Street
R.D.C.
Chester-le-Street
U.D.C.
Consett
Darlington
Durham C.C.
Durham R.D.C.
Easington
Eston
Felling
Gateshead
Gosforth
Hartlepool
Hebburn
Hetton

Houghton-le-
Spring
Jarrow
Lanchester
Longbenton
Middlesbrough
Newburn
Newcastle-upon-
Tyne
Northumberland
C.C.
Prudhoe
Redcar
Ryton
Seaham
Sedgefield
South Shields
Stanley
Sunderland
Wallsend
Washington
West Hartlepool
Whickham
Associates
Whitley Bay

Division 5 Yorkshire

Members

Adwick-le-Street
Aireborough
Batley
Bentley-with-
Arksey
Bingley
Bradford
Bridlington
Brighouse
Castleford
Colne Valley
Conisbrough
Dearne
Denby Dale
Dewsbury
Doncaster
Doncaster R.D.C.
Halifax
Harrogate
Hemsworth
Holmfirth

Huddersfield
Hull
Keighley
Leeds
Mexborough
Mirfield
Morley
Pontefract
Pudsey
Queensbury and Shelf
Rawmarsh
Rothwell
Sheffield, Rotherham & District
Smoke Abatement Committee
Shipley
Stanley (Yorks.)
Stocksbridge
Swinton
Wakefield
Wombwell
York
Associates
Scarborough

Division 6 West Midlands

Members
Birmingham
Brierley Hill
Burton-upon-Trent
Cannock
Coventry
Darlaston
Dudley
Halesowen
Kidderminster
Meriden
Newcastle-under-Lyne
Nuneaton
Oldbury
Rowley Regis
Rugby
Sedgley
Shrewsbury
Smethwick
Solihull
Staffordshire C.C.
Stoke-on-Trent
Stone
Stourbridge

Tipton
Walsall
Warwickshire C.C.
Wednesbury
West Bromwich
Willenhall
Wolverhampton
Associate
Stafford

Division 7 East Midlands

Members
Basford
Beeston and Stapleford
Blackwell
Bolsover
Boston
Chesterfield
Corby
Derby C.C. (Co. Planning Cttee. —Corporate)
Dronfield
Gainsborough
Great Yarmouth
Grimsby
Heanor
Hinckley
King's Lynn
Kirkby-in-Ashfield
Leicester
Lincoln
Long Eaton
Louth
Lowestoft
Mansfield
Mansfield Woodhouse
Market Harborough
Newark
Nottingham
Peterborough
Ripley
Rushden
Southwell
Staveley
Sutton-in-Ashfield
Swadlincote
West Bridgford
Worksop
Associate
Cambridge
Derby

Division 8 South West

Members
Abercarn
Abertillery
Bath
Bathavon
Bedwas & Machen
Blaenavon
Bristol
Cardiff
Cardiff R.D.C.
Cheltenham
Clevedon
Cwmbran
Ebbw Vale
Gellygaer
Gloucester
Kingswood
Llantrisant and Llantwit Fadre
Merthyr Tydfil
Mynyddislwyn
Neath
Neath R.D.C.
Newport (Mon.)
Pontypridd
Portishead
Swindon
Thornbury
Tredegar
Warmley
Ystradgynlais
Associates
Poole
Swansea
Weston-super-Mare

Division 9 South East

Members
Acton
Banbury
Barking
Barnes
Battersea
Bedfordshire C.C.
Bermondsey
Bexley
Brighton
Camberwell
Chatham
Chelmsford

Chelsea
Chingford
Chislehurst and Sidcup
Crayford
Dartford
Dartford R.D.C.
East Ham
Eastleigh
Edmonton
Erith
Eton
Fareham
Farnborough
Feltham
Finchley
Finsbury
Fulham
Gravesend
Guildford
Hackney
Hammersmith
Hampstead
Harrow
Heston and Isleworth
Hornchurch
Ilford
Kingston-on-Thames
Letchworth
Lewisham
London, City of
Maidenhead
Malden and Coombe
Merton & Morden
Oxford
Paddington
Richmond
Rochester
St. Albans
St. Marylebone
Shoreditch
Slough
Southall
Southend-on-Sea
Southwark
Southwick
Stepney
Stoke Newington
Sutton & Cheam
Thurrock
Tottenham
Uxbridge
Walthamstow

Wanstead and
Woodford
Watford
Wembley
Westminster
Willesden
Wimbledon
Windsor

Windsor R.D.C.
Associates
Bournemouth
Carshalton
Dagenham
East Sussex C.C.
Enfield

Gosport
Greenwich
Holborn
Kensington
Kent C.C.
Lambeth
Leyton
Luton

Mitcham
Portsmouth
Reigate
St. Pancras
Southampton
Wandsworth
West Ham
Wood Green

Scottish Divisional Council

Chairman : Allan W. Ritchie, M.B.E.,
F.R.SAN.I.

Hon. Secretary : John Traill, B.L.

Secretary's Office : City Chambers,
Glasgow.
Central 9600
Ext. 220

North East Divisional Council

Chairman : Alderman J. Chapman

Hon. Secretary : William Gray,
M.R.SAN.I., F.S.I.A.

Secretary's Office : Health Department,
Town Hall,
Newcastle-on-Tyne, 1
Newcastle 28520
Ext. 271-2

Yorkshire Divisional Council

Chairman : T. Henry Turner, M.Sc.

Hon. Secretary : James Goodfellow,
M.R.SAN.I., A.M.I.S.I.

Secretary's Office : Public Health Dept.,
12 Market Buildings,
Vicar Lane, Leeds, 1.
Leeds 30211, Ext. 11

North West Divisional Council

Chairman : Alderman Professor F. E.
Tylecote, M.D.

Hon. Secretary : H. Moore

Secretary's Office : Public Health Dept.,
Town Hall,
Manchester.
Central 3377
Ext. 339

East Midlands Division

Hon. Secretary : Alfred Wade, M.B.E.,
F.R.SAN.I.

Secretary's Office : Sanitary Inspectors'
Office,
50 Shakespeare Street,
Nottingham.
Nottingham 40584

Twentieth Annual Report

for the Year ended 31st December, 1949

GENERAL REVIEW

1949 may be regarded as a year of consolidation rather than one marked by important milestones. Nevertheless, in the field of domestic smoke prevention especially there have been many signs of progress towards that change in public opinion and habits that will eventually lead to the relegation of the old-fashioned coal-burning grate and range from the home to the museum. The new appliances are now more easily obtained and are steadily becoming more familiar and popular. The value of the efficient closable stove, which up to recently found little public favour, is especially being more and more appreciated. Although in many cases bituminous coal continues to be used in appliances more suitable for smokeless fuels, the latter are now in better supply than at any time since 1939, and the announcement at the end of the year that coke was being taken off the ration was greatly welcomed. Much remains to be done, however, to encourage the use of coke and other smokeless fuels, and questions of price and quality need to be considered.

In the industrial field little change has been noted, and many varied complaints reach the Society or are noted in Press reports. Railways, collieries, cement works, power stations (in respect of grit), colliery spoilbanks, and many smaller types of plant, such as laundries, are mentioned. Although the poorer quality of coal available is frequently given as the reason for smoke or grit emission it is frequently not the only or the chief factor.

The economic case against smoke has

been further strengthened during the year by the publication of the Fuel Research Technical Paper No. 55, on "The Effect of Certain Factors on the Efficiency of a Hand-fired, Natural Draught, Lancashire Boiler," which among other things shows conclusively how thermal efficiency falls as smoke density increases: not to any material extent by the heat lost in the visible smoke itself, but by that contained in the invisible combustible gases—the crude coal gas—that accompanies smoke. The Paper is reviewed in *SMOKELESS AIR*, No. 72, Winter, 1949.

Much news and data of importance has again come from the United States, in respect of legislation, technical developments, conferences, and the Federal Health Report on the disastrous Donora smog of October, 1948. This last report is easily the most important document published in recent years on the effects and consequences of atmospheric pollution upon human health, and is being reviewed at length in *SMOKELESS AIR*.

An important paper by Sir Eustace Missenden, Chairman of the Railway Executive to the Institute of Transport, on 21st November, 1949, was of considerable interest and significance. The author stressed the adverse effects of locomotive smoke on the popularity and comfort of travel by rail, and the increased costs of maintenance and repair that have to be borne by the railways themselves. Sir Eustace's advocacy of electrification as the remedy will be welcomed by all concerned with smoke prevention.

THE SOCIETY

The Society's constant difficulty of containing its work within the limits of its resources has become more serious during the year, with the result, as the statement of accounts reveals, that

expenditure exceeded income by over £700. The small reserves maintained for such eventualities have had to be drawn upon to meet the deficiency, but this procedure cannot be repeated for

long, and some economies have had to be made to ensure that the budget is more nearly balanced during the financial year ending 30th June, 1950.

It will be seen that the difficulty is not due to any fall in subscriptions, which continue to show a useful, if still insufficient, rise, but to the steep increase in expenditure arising from expanding activities and heavier overhead costs, especially for rent, printing, and office supplies.

It is difficult to reduce activities without injuring the Society and its future prospects, especially as even now a great many things that ought to be done, or are expected of the Society, have to be deliberately neglected or carried out less effectively than is desired. Therefore, as has been stressed before, the effort to obtain substantial new income must be continued.

Discussions were held during the year on the possibility of a grant from Government sources, and appreciation of the Society and its work, and of the need for its continuance, was expressed. Unfortunately, however, the final decision was made about the time, during the autumn, that reductions in Government expenditure were being imposed, and we were informed that a grant could not at present be made.

Fortunately, the support given to the Society for many years by the Gas Industry has been continued under the new organization of the Industry, and it is not unreasonable to expect that similar support will be given by the other national fuel industries. Local authority membership has increased, but it has to be recognized that very few of the larger authorities most obviously affected by smoke are not yet members, and that the heavy demands on local authority funds at present make it difficult for this class of members to increase their support to any substantial extent, despite the strong case that can be made for their so doing. The cost of smoke to the ratepayer is out of all proportion greater than the small amounts now being spent in efforts to eliminate it.

The Harrogate Conference

The annual conference at Harrogate on 28th, 29th and 30th September, 1949, was attended by 440 members and delegates—only a few less than the record number at Edinburgh in 1947. The Conference was addressed by Mr. Arthur Blenkinsop, M.P., Parliamentary Secretary to the Ministry of Health, and by the retiring President, Lord Simon of Wythenshawe. Other papers read were on "The Work of the Fuel Research Station," by Dr. A. Parker; "The Problem of Burning Colliery Spoilbanks," by Mr. J. Carr of the National Coal Board; "The Case Against Smoke: An Outside View," by Mr. Eric Sinkinson, of the University of Leeds. At the opening session of "Progress Reports" a visitor from the United States, Mr. Henry Burns, of the Los Angeles County Smoke Control District, gave a stimulating account of the work of his organization.

The following resolutions were adopted by the Conference:

1. *Approved Appliances in New Houses.* THAT this Conference welcomes the action of the Minister of Health and the Secretary of State for Scotland in requiring Local Authorities to specify only the types of grate or stoves included in the list of approved appliances for installation in houses built under their housing schemes, and expresses the hope that they will extend this requirement to houses built under licence by private enterprise.

2. *Use of Smokeless Fuels in New Houses.* THAT this Conference learns with regret that in many instances bituminous coal is being burnt in grates suitable for smokeless fuels in houses in Local Authority estates, which is in some cases exceptionally offensive from its being emitted at a low level from prefabricated bungalows, and asks all Local Authorities to encourage the use of smokeless fuel in these grates.

The President

Lord Simon of Wythenshawe was succeeded in office as President by Dame Vera Laughton Mathews, D.B.E. The Society is honoured by the former Director of the Women's Royal Naval

Service and present Chairman of the Domestic Coal Consumers' Council accepting this position, and as a body concerned with a problem that affects women so seriously, may congratulate itself for having for the first time elected a woman as its President. Already her influence is proving to be of value to the Society.

The Divisions

The established Divisional Councils in Scotland, Yorkshire, and the North West, have continued to be active, as their reports, following, will show. During the year two new Divisional Councils, for the North East and the East Midlands, have been successfully inaugurated.

Publications

Both lack of available time and the need to reduce expenditure have prevented the preparation of any new publications other than the regular issues of *SMOKELESS AIR*, the Conference *Proceedings*, and smaller leaflets, including the new *Guide to Publications*. The lifting of paper restrictions on periodicals has made it possible to return to the issue of four numbers of *SMOKELESS AIR* each year, and efforts are being made to increase advertising so that the magazine can be correspondingly enlarged in its editorial pages. At present a great deal of material that could be published with advantage has to be omitted, and many reports have to be severely condensed.

Information Service

It is difficult to give figures that show the extent of the Society's activity, but it may be of interest to mention that during 1949 the outward postages from Chandos House numbered approximately 33,000. Most of these, in one way or another, sent out information about the Society or about smoke prevention.

Although it is impossible to measure the general increase of interest that has taken place since the war, as compared with the years to 1939, there is no doubt about its reality. One factor, very evident at the Society's offices, is the increase in the number of requests

made to it—mainly by non-members—for information, assistance, and advice. Inquiries cover a wide range of subjects, from individuals troubled about specific smoke problems, to requests for scientific or technical information. In many instances the Society can best assist by putting the inquirer into touch with a more direct or authoritative source of information, but in any case a great deal of time, in the aggregate, is taken up by seeking to be as helpful as possible. It is, however, considered that the Society is carrying out one of its essential functions in performing such services, even without recompense of any kind.

Publicity

General publicity has included participation, or the loan of material for 18 exhibitions. Thirteen of these exhibitions were organized by various Local Authorities and included in the remainder was the display given during the conference of the Central Council for Health Education at the Central Hall, Westminster. Several reports have been received of the success of these exhibitions and of the interest shown in the Society's exhibits.

Several new exhibits, designed for easy transport and durability have been prepared and put to good use during the year, and when funds permit it is hoped to extend the number and variety available and to offer them on loan more widely than is at present possible.

Sales of publications, and the number distributed free of charge for propaganda purposes, have been well maintained, and although in quantity the number is not very large, the effectiveness of even single copies is sometimes considerable. Much of the material that appears in popular articles and features in newspapers and periodicals is based on information obtained from the Society's publications or otherwise through the Society's assistance.

About 2,000 Press cuttings are received each year covering both home and overseas news items. The reading, classification and mounting for permanent reference of these cuttings, together with the action that many of them make possible, is, as will be appre-

ciated, a useful part of the Society's "intelligence."

The collection of photographs has also been steadily extended and the demand for them by authors, publishers and various organizations has been maintained.

It is interesting to note that there has been an increased demand for the loan

of books, reports, etc., from the Society's library. Many of the inquiries have come from Government departments and headquarters of the recently nationalized industries.

CHARLES GANDY, *Chairman*.

ERNEST SMITH, *Hon. Treasurer*.

ARNOLD MARSH, *General Secretary*.

SCOTTISH DIVISION

Although nothing spectacular has been achieved by the Scottish Division during the past year the interest of members in the objects of the Society has been maintained. There has been an increase in the number of individual members. Meetings have been better attended and discussions lately have been much more lively and even when meetings have lasted a considerable time they have terminated with an impression that the proceedings have stimulated the interest of the individual members.

In pursuance of the Scottish Division's standing principle of encouraging to the full any educational and training activities, the Annual Winter Course in Fuel Economy, Smoke Abatement and Boilerhouse Practice is now in session. This constitutes the 34th Winter Session, the class having been originally instituted or incepted in 1910. During the intervening years similar courses have been carried out by the Division on behalf of other local authorities, e.g., Paisley, Irvine, Airdrie and Edinburgh. In the latter centre the course is held in collaboration with the local Public Health Department. The venue of the class this year is again the Burgh Court Hall, New Municipal Buildings, Glasgow, and as has been the case during the past four years it is held under the joint aegis of the National Smoke Abatement Society, the Corporation of Glasgow, and the Ministry of Fuel and Power. The *locus* is in a most central position of the city and is conveniently accessible from all surrounding areas. The students are

drawn from a very wide radius. The total enrolment for the present session so far has been 124, of which 41 are attending the advanced course. Following the precedent of the last two years the class has been divided into ordinary and advanced sections and meets on Tuesday and Wednesday evenings of each week. So far almost a full attendance has been sustained during the five complete lectures already given, and this in spite of the difficulties with shift working arrangements. The indications are that there will again be an even larger entry for the City and Guilds of London Institute Examinations in Boilerhouse Practice to be held at the beginning of May, and in connection with which several extended refresher lectures will be given during the month of April. The present course should finish towards the middle of January, 1950, and will conclude with the usual class examinations on the results of which merit certificates and prizes will be awarded in accordance with the practice of the Scottish Division. A printed syllabus for the current session is sent to all industrial firms throughout the City area. A social evening is held at the end of the session when prizes and certificates are awarded.

It is proposed to hold the Conference for the year 1950 in Aberdeen and the Division is being more enterprising than usual in as much that it has agreed that the Conference should be held on two days and not on one day only as in previous years.

JOHN TRAILL, *Hon. Secretary*.

NORTH EAST DIVISION

The North East Divisional Council commenced operations on 8th February, 1949, at an inaugural meeting held in the Town Hall, Newcastle-upon-Tyne. Altogether 98 representatives attended, who were welcomed by the Right Honourable the Lord Mayor of Newcastle-upon-Tyne, Alderman T. McCutcheon, J.P. The meeting was unanimous in its decision to form a North East Divisional Council and set up a Provisional Committee of 10 under the Chairmanship of Alderman J. Chapman, Chairman of the Health Committee, Newcastle-upon-Tyne C.B., to draft Rules and Constitution for the Council.

The second meeting of the Council was held in the Town Hall, Newcastle-upon-Tyne, on 28th April, 1949, when Alderman J. Chapman was unanimously appointed to the Chair, with Alderman P. S. Hancock, O.B.E., as his deputy. An Honorary Secretary and Treasurer was also appointed, together with an Executive Committee of 16 members (9 members from County Durham, 6 from Northumberland and 1 from the Cleveland Area of Yorkshire). The Rules and Constitution as drafted by the Provisional Committee were discussed and, with some slight amendment, adopted.

The Hon. Secretary and Treasurer gave a short address on the aims and objects of the Society and the powers of local authorities in relation to smoke nuisances and other causes of atmospheric pollution.

Up to the end of the year, the Executive Committee held three meetings and of the business carried out by them the item of major importance was that of "Sources and Incidence of Atmospheric Pollution in the North East Area." In regard to this, the valuable information gained by the Society as a result of their survey of the country as to atmospheric nuisances, was of immeasurable help, and a report was compiled on the matter as it affected the north east and circulated to all members of the Council.

The third meeting of the Council was held on 3rd December, 1949, at the

Shire Hall, Durham City. In addition to members, invitations were also sent out to non-member local authorities and others. In all 78 representatives attended.

The morning session was addressed by Mr. Arthur Blenkinsop, M.P., Parliamentary Secretary, Ministry of Health, who gave a very interesting and informative talk on ministerial policy in regard to atmospheric pollution. The afternoon was devoted to a paper by Mr. G. Tate, Chief Sanitary Inspector and Housing Manager, Ashington U.D.C., on "Colliery Spoilbanks."

The principle business item during the morning was the presentation of the report of the Executive Committee on "Sources and Incidence of Atmospheric Pollution in the Council's Area," which, after full discussion, was unanimously adopted and resolution was also made that representatives of local authorities present the report for adoption by their respective local authorities. The report is as follows :

- I. *A common policy* as to the elimination of atmospheric pollution in the North East Area be adopted and carried out by all Local Authorities and the Council in the North East Area.
- II. That in pursuance of this all Local Authorities :
 - (a) Install a sufficient number of Deposit Gauges and Sulphur Dioxide Recorders so as to ascertain the deposit of smut, grit, etc., on their respective areas and on the area as a whole, and to measure the sulphur dioxide pollution of the atmosphere.
 - (b) Promote a by-law with respect to the emission of black smoke from chimneys other than those of private dwelling-houses. Such by-laws to be uniform throughout the area as to the permissive emission of black smoke in a prescribed period.
 - (c) Obtain legislative power to ensure that plans and specification of any furnace intended to be installed in any building and to be used for steam raising or for any manufacturing or trade purposes, be submitted for examination and approval.
 - (d) (i) Install approved fireplaces (to consume smokeless fuel) in all

planned Council premises if so designed for open fireplaces ;

- (ii) to replace (or to dispense with wherever possible) at an appropriate time, all fireplaces other than those of an approved type in other Council premises ; and
- (iii) on submission of plans by private enterprise of new premises or schemes of reconditioning of premises, to ensure that the fireplaces are of an approved type.

(e) Give early consideration as to the commencement of elimination of sources of smoke pollution in their area by way of the establishment of a smokeless zone, or zones, and as convenient, add other smokeless zones so as to ultimately convert the whole area into a smokeless zone.

(f) To arouse by publicity and any other method the interest of everyone concerned in the matter of smoke abolition.

III. That courses as to the work or duties of a boiler stoker or fireman be arranged at convenient centres and that all establishments in the area be contacted with a view to the attendance at the courses

of their staffs engaged in this class of work.

In regard to the report two local authorities have already adopted it in full.

It will be seen that the eleven months' activities of the Council have been largely devoted to preparing a very solid foundation upon which to build the work that lies ahead. In this preparatory work the influence of the Northumberland and Durham Advisory Regional Smoke Abatement Committee's activities, which commenced in 1933 and ceased in 1939, has been beneficially experienced. One of the aims of the Council is not only a 100 per cent. membership of local authorities but also of all others who are concerned in the securing and maintenance of a clean, unpolluted air. Further, constant endeavour will be made to carry out successfully all of the present objects of the Society and also future commitments as they arise.

W. GRAY, *Hon. Secretary and Treasurer.*

YORKSHIRE DIVISION

During 1949 the Yorkshire Divisional Council has pursued as far as practicable its stated policy of holding Council meetings in the various cities and towns in the Division. The average attendance at Divisional Council meetings has been between 10 and 11. Special attention has been given to instruments used for recording atmospheric pollution.

Preceding the March meeting in Leeds and the June meeting in Halifax, the Council made very interesting and instructive tours of the atmospheric pollution recording stations in the two boroughs, and were able to assess at first hand the existing arrangements for measuring atmospheric pollution and the siting of the various instruments. On these tours the Council was accompanied by representatives of the local Press who gave the work of the National Smoke Abatement Society considerable publicity.

Atmospheric pollution instruments in operation in the Yorkshire Division

during 1949 were as follows : Deposit Gauges, 59 ; Lead Peroxide Instruments, 48 ; Volumetric Apparatus and Smoke Filter, 5. In addition to these instruments which are maintained by Boroughs, Urban and Rural District Councils, the West Riding County Council are in process in installing, or have installed, a number of further instruments, viz. : at least one Deposit Gauge, one Lead Peroxide Instrument and one Smoke Filter in each of the thirty-one medical divisions in the West Riding. We are also pleased to report that several other local authorities in the area now have apparatus on order and which when delivered will provide another 11 Deposit Gauges and 7 Lead Peroxide Instruments. There is therefore every prospect of the number of atmospheric pollution recording instruments in the Division being considerably increased during the next few months.

The Society's Harrogate Conference

held so much attention this year that it was not considered desirable to arrange other public meetings in Yorkshire, but the Officers and Council members were active in meetings and conferences arranged by other organisations, including the Wool Textile Fuel Efficiency Conference at Huddersfield, arranged by the Ministry of Fuel and Power. Mr. T. Henry Turner, our Chairman, gave an address on Coal Smoke to the South Elmsall Rotary Club in January and to the Harrogate Rotary Club in September. Lectures were also arranged to be given to the York Branch of the Electrical Association for Women, by Mr. Norman Hancock, and to the Townswomen's Guild at Huddersfield, by Mr. Dennis Drake.

Combined efforts have been made

during the year to improve atmospheric conditions in the Stocksbridge Urban District. The United Steel Companies are extending the use of gas for process furnaces; the District Council are providing smokeless methods of heating and cooking in their new houses; Mr. James Law, Chief Smoke Inspector to the Sheffield, Rotherham and District Smoke Abatement Committee, and his staff, having secured the promised co-operation of the Local Authority, and the directors, staff and research department of the United Steel Companies, have been concentrating on atmospheric pollution in Stocksbridge and recording apparatus has been installed to ascertain the extent of any improvement.

JAMES GOODFELLOW, *Hon. Secretary.*

NORTH WEST DIVISION

The North West Division has continued to make steady progress during the year 1949, although no outstanding developments can be recorded. The Divisional Council has met at regular intervals and has held four meetings during the year. Once again it has been possible to break new ground and the towns of Leigh, Bolton, Salford and Hyde in turn have been visited at the kind invitation of the Local Authorities concerned. The business of the meetings has been dealt with expeditiously and throughout the proceedings the desire to push ahead in the achievement of the Society's objectives has been manifest. At Leigh we were able to devote some time to studying local atmospheric conditions reported by Mr. H. Clusky, Senior Sanitary Inspector, in an address and to see the film "Pictures in the Fire," produced by Allied Ironfounders Limited. At Bolton, Mr. G. Hiller, Chief Sanitary Inspector, gave an interesting talk on the Fuel Research Station's fire door, and we were able to see this smoke reducing device in operation at a large cotton spinning mill.

The Annual Meeting of the Division followed the meeting of the Divisional Council held at Salford, hence there

was no time available for any other special feature. Our meeting at Hyde was all the more attractive because the Mayor, Councillor Mrs. M. Bayes, is one of our own members who has always displayed the keenest interest in smoke abatement.

Annual general meetings can often be dull affairs, but that held at Salford was an exception for interest was quickened, tongues unleashed and the hands of the clock moved all too swiftly. A new Divisional Council was elected and new members have rapidly got into their stride and we look forward to an active year ahead, fortified by new enthusiasm.

Two special committees have been set up, one to deal with the policy and activities of the Divisional Council during the forthcoming year and the other to investigate the advisability of setting up an advisory panel to give expert opinion on atmospheric pollution problems within the Division.

A tripartite meeting of the Society, the Institution of Municipal Engineers and the Manchester Society of Architects was convened by the North West Division on 28th January, when Domestic Heating was the topic. Dr. J. L. Burn for the Society presented a

paper on "Heating Requirements"; Mr. A. S. Hamilton (Municipal Engineers) dealt with "Appliances which would Fulfil the Requirements"; and Mr. F. L. Halliday (Society of Architects) with house design with particular regard to heating.

Two joint meetings with the Institute of Fuel have been held during the year, the first on 9th March, when Mr. P. D. Kirkman, Regional Fuel Engineer of the Ministry of Fuel and Power, spoke on Fuel Efficiency, and on 9th November the subject was "Industrial Gas in the Manchester District," the paper

being presented by Mr. W. F. Howell, of the North Western Gas Board. Both these meetings were interesting and informative, and were worthy of much larger attendances.

It is with sincere regret that we have to record the death late in the year of a member of the Council, Councillor Mrs. M. E. Welch, of Horwich, who always devoted time and interest to the cause and at all times made useful and practical contributions to our deliberations.

H. MOORE, *Hon. Secretary.*

EAST MIDLANDS DIVISION

A divisional organization has now been established in the East Midlands. At a meeting at the Council House, Nottingham, on 7th April, 1949, presided over by the Lord Mayor of Nottingham (Councillor J. E. Mitchell) and attended by 95 delegates representing 34 local authorities and seven other bodies, it was decided to establish a Divisional Council for the area comprising the counties or shires of Cambridge, Derby (excepting the High Peak area), Huntingdon, Leicester, Lincoln, Nottingham, Norfolk, Northampton, the Soke of Peterborough, Rutland, Suffolk and the Isle of Ely. A provisional committee and honorary secretary were appointed to draft a constitution.

A further meeting was held at The Guildhall, Nottingham, on 28th July, 1949, under the chairmanship of Alderman Ernest Purser (Chairman of the Health Committee, City of Nottingham), when rules and a constitution for the division were adopted. The provisional committee and the honorary secretary were invited to act as a divisional council until elections take place in July, 1950.

On 10th November, 1949, a display of coke and gas burning appliances was staged at the Leicester Showrooms of the East Midlands Gas Board, in conjunction with the meeting of the division held at the Town Hall, Leicester, on the same day. The display was open from 10 a.m. onwards and included a showing of films. Coke-burning appliances were in operation in the Showrooms and the view was expressed by delegates that such demonstrations, open to the general public, would do much to stimulate enthusiasm for smokeless methods of domestic heating. An address entitled "The Householder and Smoke Abatement" was given by Mr. E. D. L. Shaw, A.I.H.V.E., Industrial Gas Engineer, East Midlands Gas Board, and an excellent discussion followed.

It is hoped to arrange meetings at suitable centres in all parts of the division. The results so far achieved by the division are encouraging and the provisional committee has every reason to look to the future with confidence.

A. WADE, *Hon. Secretary.*

NATIONAL SMOKE ABATEMENT SOCIETY

Income and Expenditure Account, Year ended June 30th, 1949

Year ended June 30th, 1948	1948		Year ended June 30th, 1949	1949		EXPENDITURE	1949	
	£	s. d.		£	s. d.		£	s. d.
INCOME	Subscriptions	3,343 10 6	...	...	...	Salaries	...	2,493 8 3
	Sale of Literature	92 18 5	...	...	...	Rent, Rates, Gas, Water and Heating	...	430 11 9
	Repayment of Income Tax	41 15 10	...	...	...	Office Supplies and Stationery	...	188 1 10
	Conference Fees less Expenses	328 7 11	...	...	...	Travelling Expenses	...	49 4 8
	Sundry Receipts	18 5 10	...	...	...	General Expenses, Postages and Telephone	...	647 15 1
DIVIDENDS FROM INVESTMENTS, ETC.	Commercial Union Assurance Co. Ltd.	5 3 1	...	...	...	Divisional Expenses	...	210 0 0
	British Transport	6 10 2	...	...	...	Printing <i>Smokeless Air</i>—	...	...
	Post Office Savings Bank	12 18 6	...	...	...	Less Receipts from Advertisements	...	223 9 4
	Interest—Manchester and Salford Savings Bank	11 13 6	...	...	...	Printing and Publishing Booklets, etc.	...	559 18 2
	Excess of Expenditure over Income	204 17 5	...	...	...	Staff Pension Scheme	...	99 1 6
		£4,006 1 2				Furniture and Fittings	...	45 11 0
							£4,947 1 7	

Defence Bond Fund

£	s. d.	£	s. d.	£	s. d.	£	s. d.
500	4 4	Balance, June 30th, 1948	...	...	...	515	3 3
14	18 11	Interest and Premium on Conversion to 2½%	...	...	...	Balance, June 30th, 1949	...
							532 17 2
£515	3 3						£532 17 2

Balance Sheet, June 30th, 1949

£	s. d.	£	s. d.	£	s. d.	£	s. d.
SURPLUS				INVESTMENTS (General)			
2,511	3 3	Balance as at June 30th, 1948	...	2,306	5 10	Commercial Union Assurance Co.—	...
204	17 5	Less Excess of Expenditure over Income	...	716	6 7	£25 Stock at Cost	...
2,306	5 10			...	...	British Transport—	205 11 0
281	18 6	Fees received on Account of Harrogate Conference	...	...	...	£371 9s. 10d. 3% Guaranteed Stock, 1978-88	...
6	0 0	Subscriptions in advance	...	...	...	Post Office Savings Bank	279 5 11
		DEFENCE BOND FUND	...	...	...	Manchester and Salford Savings Bank—	551 6 0
515	3 3	Balance	...	...	...	Deposit	491 8 8
							1,527 11 7
						Cash at Bank and in Hand (General)	274 7 8
DEFENCE BOND FUND				DEFENCE BOND FUND			
				480	0 0	3% Defence Bonds	...
				35	0 0	2½% Defence Bonds	...
				3	3	Cash in Hand	...
				10	0 0	Electricity Deposit	...
				75	5 4	Stock of Books for resale	...
						Rent paid in advance	...
£3,109	7 7			£3,109	7 7		...
							532 17 2
							10 0 0
							3 10 0
							—
							£2,348 6 5

Subscriptions and Donations

for the Year ended 30th June, 1949

* Denotes Covenant Subscriber

Division 1—Scotland

	£	s.	d.
Airdrie Corporation	3	3	0
Ardrossan Corporation	2	2	0
Ayr Corporation	3	3	0
Bowies Associated Services Ltd.	17	6	
Brown, Robert C.	1	1	0
Clydebank Corporation	3	3	0
Coatbridge Corporation	3	3	0
Currie, T. S.	10	6	
Dumbarton Corporation	2	2	0
Dumbarton County Council	4	4	0
Dundee Corporation	10	10	0
Dunfermline Corporation	3	3	0
East Kilbride Development Corporation	5	5	0
Edinburgh Corporation	15	15	0
Falconer, Mrs. J.	10	6	
Falkirk Corporation	3	3	0
Forrest, Frew & Co. Ltd. (1948)	10	6	
(1949)	10	6	
Glasgow Corporation	26	5	0
Glasgow Women's Citizens Association	1	1	0
Gratridge, H. H.	5	0	
Greenock Corporation	5	5	0
Hamilton Corporation	3	3	0
Hawick Corporation	2	2	0
Heriot-Watt College	1	1	0
Howden, James & Co. Ltd.	10	10	0
Inverness Corporation	3	3	0
Irvine Corporation	2	2	0
Jedburgh Corporation	2	2	0
Jewell, Mrs. K. I.	10	6	
Johnstone Corporation	2	2	0
Kilmarnock Corporation	3	3	0
Kilsyth Corporation	2	2	0
Kirkcaldy Corporation (1948)	3	3	0
(1949)	5	5	0
Kirkintilloch Corporation	2	2	0
Lanark County Council	15	15	0
Macmillan, A. M.	1	1	0
McCallum & Craigie Ltd.	10	6	
McKay, W. C.	10	6	
Millar, A. W.	5	0	
Motherwell & Wishaw Corporation (1948)	4	4	0
(1949)	4	4	0
Paisley Corporation	5	5	0
Paton, T.	10	6	
Perth Corporation	3	3	0
Port Glasgow Corporation	2	2	0
Renfrew Corporation	2	2	0
Renfrew County Council	10	10	0
Ritchie, G. B.	10	6	
Robertson, Baillie, Dr. V.	1	1	0
Rothsay Corporation	2	2	0
Royal Sanitary Association of Scotland	1	1	0
Rutherglen Corporation	3	3	0
Scottish Council of Women Citizens Assns.	2	2	0
Scottish Junior Gas Association	1	1	0
Scott Park, Dr. and Mrs. S. D.	10	6	
Smith, Mrs. Brownhill	10	6	
*Stead, G. W.	10	0	0
Stirling County Council	10	10	0
Thompson, Mrs. H. I.	10	6	
Waldie, J. & Sons Ltd.	1	1	0
West Lothian County Council	2	2	0
Wightman, Mrs. U. N.	10	6	

Division 3—North West

	£	s.	d.
Abram U.D.C.	2	2	0
Affleck & Brown Ltd.	2	2	0
*Aitkenhead, Miss M.	15	6	
Altrincham Gas Co.	2	2	0
Andrew, W. H.	1	0	0
Anonymous	20	0	0
Anonymous (1948)	1	1	0
(1949)	1	1	0
Ashton Bros. & Co. Ltd.	2	2	0
Ashton Gas Company	3	3	0
Ashworth, J. R.	10	6	
Atherton U.D.C.	2	2	0
*Barash, Dr. M.	10	6	
Barrow-in-Furness Corporation	4	4	0
Baxendale & Co. Ltd.	2	2	0
Bayes, Councillor Mrs. A. W.	2	2	0
Beard, E.	1	1	0
Beattie, E. & F. Ltd.	1	1	0
Behrens, A.	10	0	
Bibby, H. P.	2	0	0
Bibby, J. & Sons Ltd.	10	10	0
Birkenhead Corporation	2	2	0
Blackburn Corporation	10	10	0
Blackpool Corporation	10	10	0
Bolton Corporation	10	10	0
Bootle Corporation	5	5	0
Bulmer, H. E.	10	6	
Burnley Corporation	5	5	0
Burnley Corporation Gas Department	1	1	0
Bury Corporation	4	4	0
Buxton Corporation	2	2	0
Carlisle Corporation	4	4	0
Chadderton U.D.C.	3	3	0
Cheadle & Gatley U.D.C.	3	3	0
Chester Corporation	3	3	0
Chester United Gas Co.	2	2	0
Church U.D.C.	2	2	0
Clitheroe Corporation	2	2	0
Cooper, Miss I.	1	1	0
Crewe Corporation	4	4	0
Crompton U.D.C.	2	2	0
Darwen Corporation	3	3	0
Davies, D. E.	10	6	
Dean, F. H.	10	0	
Denton U.D.C. (1948)	2	2	0
(1949)	2	2	0
Droylsden U.D.C.	3	3	0
Duguid, Mr. and Mrs. S.	1	1	0
Eccles Corporation	3	3	0
Edwards, Miss M.	5	0	
Failsworth U.D.C.	2	2	0
Farnworth Corporation	3	3	0
Fildes, Mrs. A.	10	6	
FitzGerald, Miss M.	10	6	
Forrester, R. E.	1	0	0
*Gandy, Charles	5	0	0
Gandy, Mrs. Charles	10	6	
Gavaghan, Mrs. L. A.	10	6	
Glossop Corporation	2	2	0
Gregory, J.	1	0	0
Griffiths, The Misses	10	0	
Hale U.D.C.	2	2	0
Hancock, A.	1	1	0
Hanratty, V.	10	6	
Hardy, G. & Co.	2	2	0
Hartley, G. E.	10	6	
Hay, Dr. J.	1	1	0
Hayhurst, Mr. H. and Mrs. L.	1	1	0
*Herbert, J. L.	10	6	

Division 2—Northern Ireland

Young, Miss A. C.	10	0	
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	£	s.	d.
Seaham U.D.C.	3	3	0
Sedgefield R.D.C.	3	3	0
South Shields Corporation	10	10	0
Stanley (Co. Durham) U.D.C.	4	4	0
Sunderland Corporation	10	10	0
Wallsend Corporation	3	3	0
Washington U.D.C.	2	2	0
West Hartlepool Corporation	4	4	0
Whickham U.D.C.	2	2	0
Whitley Bay U.D.C.	1	1	0

	£	s.	d.
Stanley (Yorks.) U.D.C.	2	2	0
Stocksbridge U.D.C.	2	2	0
*Turner, T. Henry	10	6	
Wakefield Corporation	5	5	0
Warwick, H.	10	6	
Webb, R. N.	1	1	0
West Riding Group of Gas Companies	10	10	0
Wood, F. T.	10	6	
York Corporation	5	5	0
York, Harrogate and District Group of Gas Companies	14	14	0

Division 5—Yorkshire

Adwick-le-Street U.D.C.	2	2	0
Aireborough U.D.C.	3	3	0
Ambler, T. & Sons	1	1	0
Batley Corporation	3	3	0
Bingley U.D.C.	2	2	0
Bonner, J. R.	5	0	
Bradford Corporation Health Department	15	15	0
Bradford Civic Society	1	1	0
Bradford Gas Department	10	10	0
Bray, G. & Co.	10	10	0
Bridlington Corporation	2	2	0
Brighouse Corporation	3	3	0
Brighouse Gas Committee	10	10	0
Brown, G. L.	2	2	0
*Carpenter, V. A.	10	6	
Castleford U.D.C.	3	3	0
Clayton, Son & Co. Ltd.	2	2	0
Clegg, E.	10	6	
Coke Oven Managers' Association	5	5	0
Colne Valley U.D.C.	2	2	0
Conisbrough U.D.C.	2	2	0
Dearne U.D.C.	2	2	0
Dewsbury Corporation	4	4	0
Doncaster Corporation	4	4	0
Doncaster R.D.C.	4	4	0
Edenbrow, J.	10	6	
Goldstern, W.	10	6	
Goodfellow, J.	10	6	
Halifax Corporation	5	5	0
Hall, J. A.	10	6	
Harrogate Corporation	3	3	0
Hebden Royd U.D.C.	1	1	0
Hemsworth R.D.C.	3	3	0
Hessle Gas Company	2	2	0
Holmes, W. C. & Co. Ltd.	10	10	0
*Holmes, W. G.	2	10	0
Huddersfield Corporation	10	10	0
Hull Corporation	15	15	0
Jefferson, P.	10	6	
Jervis, Dr. J. Johnstone	10	6	
Keighley Corporation	3	3	0
Leeds Corporation	15	15	0
Leeds Gas Department	25	0	0
Lister, H. & Sons Ltd.	2	2	0
Lomas, Mrs. B.	10	6	
Marrian, Miss E. M.	10	6	
Marshall, G. C.	5	0	
Mexborough U.D.C.	2	2	0
Micklethwait, R. G.	10	0	
Mirfield U.D.C.	2	2	0
Morley Corporation	3	3	0
Morton, Mrs. D. F.	10	6	
North Eastern Gas Board	27	2	0
Osborne, Dr. H.	1	1	0
Pontefract Corporation	2	2	0
Pudsey Corporation	3	3	0
Rawmarsh U.D.C.	2	2	0
Reeder, E. C.	10	6	
Rothwell U.D.C.	2	2	0
Scarborough Corporation	2	2	0
Scarborough Gas Company	3	3	0
*Severs, J. S.	1	0	0
Sewards-Shaw, Capt. K. E.	10	6	
Sheffield, Rotherham and District Smoke Abatement Committee	31	10	0
Shipley U.D.C.	3	3	0
Slagg, J. H.	10	0	
Spennorth U.D.C. Gas Department	5	5	0

Division 6—West Midlands

Barrow, H.	5	0	
Best, J. K.	10	6	
Bilston Corporation	5	5	0
Birmingham Corporation	26	5	0
Birmingham Gas Department	5	5	0
Brierley Hill U.D.C.	3	3	0
Burton-upon-Trent Corporation	3	3	0
Cannock District Gas Co.	3	3	0
Cannock U.D.C.	3	3	0
Collier, R. D.	10	6	
Coventry Corporation	10	10	0
Darlaston U.D.C. (1948)	2	2	0
(1949)	2	2	0
Dudley Corporation	4	4	0
Gillett, Mr. and Mrs. J. A.	2	2	0
Halesowen Corporation	3	3	0
Hall, G. R.	10	6	
Harris & Co. Ltd.	1	11	6
Hayes, Mrs. A. L.	10	6	
Herbert, A., Ltd.	1	1	0
Ibbotson, E. M. H.	5	0	
Iron Bridge & District Gas Co.	2	2	0
Kidderminster Corporation	3	3	0
Kids Grove Gaslight Co.	3	3	0
Ludlow Union Gas Co. Ltd.	2	2	0
Malpas Gas Co. Ltd.	1	1	0
Manger's Salt Works Ltd.	10	6	
Market Drayton Gas Co.	2	2	0
Midlands Joint Advisory Council for Smoke Abatement	2	2	0
Newcastle-under-Lyme Corporation	4	4	0
Nuneaton Corporation	4	4	0
Oldbury Corporation	3	3	0
Radiation Ltd.	10	10	0
Rowley Regis Corporation	5	5	0
Rugby Corporation	3	3	0
Rugeley Gas Company	2	2	0
Shrewsbury Gas Light Co.	10	10	0
Smart, R. Cecil	5	0	
Smethwick Corporation	5	5	0
Solihull Gas Company	1	1	0
Solihull U.D.C.	4	4	0
Stafford Corporation	1	1	0
Staffordshire County Council	26	5	0
Stoke-on-Trent Corporation	15	15	0
Stoke-on-Trent Gas Department	10	10	0
Stone Gas Light and Coke Co.	2	2	0
Stone R.D.C.	2	2	0
Stourbridge Corporation	3	3	0
Stourbridge Gas Department	1	1	0
Tamworth Gas Light and Coke Co.	3	3	0
Tenbury Union Gas Co. Ltd.	1	1	0
Tipton Corporation	3	3	0
Trezise, W. E.	1	1	0
Uttoxeter Gas Works Ltd.	2	2	0
Wall, J. M. Ltd.	1	1	0
Walsall Corporation	10	10	0
Wednesbury Corporation	3	3	0
Wellington (Salop) Gas Co.	10	10	0
Wem Gas Light and Coke Co.	1	1	0
West Bromwich Corporation	5	5	0
West Midlands Gas Board	13	13	0
Whitchurch (Salop) Gas Co.	2	2	0
Willenhall U.D.C.	3	3	0
Wolverhampton Corporation	10	10	0
Wolverhampton Gas Company	5	5	0

Division 7—East Midlands

	£	s.	d.
Basford R.D.C.	3	3	0
Beeston and Stapleford U.D.C. (1948)	3	3	0
(1949)	3	3	0
Blackwell R.D.C.	3	3	0
Bolsover U.D.C.	2	2	0
Boston Corporation	2	2	0
Cambridge Corporation	1	1	0
Cambridge University & Town Gas Light Co.	10	10	0
Catlow, J.	2	2	0
Charlesworth, Mrs.	5	5	0
Chesterfield Corporation	4	4	0
Clarke, J. A.	1	0	0
Clarke, Dr. R. T. V.	10	6	
Collier, Dr. W. A. L.	10	6	
Coote & Warren Ltd.	1	1	0
Corby U.D.C.	2	2	0
Corrin, H. R.	10	6	
Dearden, John	10	6	
Derby Corporation	1	1	0
East Midlands Gas Board	4	4	0
Fry, Miss A. R.	1	1	0
Gainsborough U.D.C.	2	2	0
Great Grimsby Gas Co.	2	2	0
Great Yarmouth Gas Co.	4	4	0
Grimsby Corporation	5	5	0
Gurney, John	2	2	0
Heanor U.D.C.	4	4	0
Hinckley U.D.C.	3	3	0
Ipswich Gas Light Co.	10	10	0
Kettering Corporation	3	3	0
King's Lynn Corporation	2	2	0
Kirkby-in-Ashfield U.D.C.	2	2	0
Leicester Corporation	15	15	0
Leicester Gas Department	3	3	0
Leominster Gas and Coke Co.	2	2	0
Lincoln Corporation	5	5	0
Long Eaton Gas Co.	10	10	0
Louth Corporation	2	2	0
Lowestoft Corporation	3	3	0
Lowestoft Water and Gas Co.	2	2	0
Mansfield Corporation (1948)	3	3	0
(1949)	3	3	0
Mansfield Woodhouse U.D.C.	2	2	0
Market Harborough U.D.C.	2	2	0
McHugh, F. G.	16	0	
Newark Corporation	2	2	0
Nottingham Corporation	15	15	0
Pearson, Dr. S. Vere	1	0	0
Peterborough Corporation	4	4	0
Ripley U.D.C.	2	2	0
Scopes, F. V.	1	1	0
Southwell R.D.C.	3	3	0
Staveley U.D.C.	2	2	0
Sutton-in-Ashfield U.D.C.	3	3	0
Swadlincote U.D.C.	2	2	0
West Bridgford U.D.C.	2	2	0
Woodcock, F. Huntly	1	0	0

Division 8—South West

Abercarn U.D.C.	2	2	0
Bathavon R.D.C.	2	2	0
Bedwas & Machen U.D.C.	2	2	0
Blaenavon U.D.C.	2	2	0
Bradshaw, Miss G.	5	5	0
Bristol Corporation	15	15	0
Bristol Gas Company	5	5	0
Bromyard Gas Co. Ltd.	1	1	0
Brynmaur and Blaina Gas Co.	1	1	0
Caldicot and District Gas Light and Coke Co. Ltd.	2	2	0
Campbell, Dr. A. F.	1	1	0
Cardiff Corporation	10	10	0
Cardiff Gas Light and Coke Co. (1948)	10	10	0
(1949)	10	10	0
Cardiff R.D.C.	3	3	0
Cawley, The Lady	1	0	0
Cheltenham Corporation	4	4	0
Cheltenham and District Gas Co.	10	10	0
Chepstow Gas Company	2	2	0

	£	s.	d.
Clevedon U.D.C.	2	2	0
Coulthurst, Mrs. A.	10	6	
Crook, Mr. S. C.	1	1	0
Cwmbran U.D.C.	2	2	0
Dixon, T. (1948)	10	6	
(1949)	10	6	
Ebbw Vale U.D.C.	3	3	0
Exeter Gaslight and Coke Co.	10	10	0
Fry, Miss A.	10	6	
Gas Consolidation Ltd.	10	10	0
Gloucester Corporation	4	4	0
Gloucester Gas Light Co.	5	5	0
Hereford Corporation	3	3	0
Kingswood U.D.C.	2	2	0
Llwhwr U.D.C.	3	3	0
Merthyr Tydfil Corporation	4	4	0
Monmouth Gas and Water Works Co. Ltd.	2	2	0
Morgan, D. & Sons	1	1	0
Mynyddislwyn U.D.C.	2	2	0
Neath Corporation	3	3	0
Neath R.D.C. (July, 1948)	3	3	0
(Dec., 1948)	3	3	0
Newport Corporation	5	5	0
Newport (Mon.) Gas Co.	10	10	0
Pontypridd U.D.C.	3	3	0
Poole Corporation	2	2	0
Portishead U.D.C.	2	2	0
*Rogers, P.	2	2	0
Ross Gas Co. Ltd. (1948)	2	2	0
(1949)	2	2	0
Seale, Mrs. I. L.	10	6	
Severn Valley Gas Corporation Ltd.	10	10	0
Shaftesbury, Lady	10	6	
Silburn, Mrs. E.	10	6	
South Western Electricity Board	10	10	0
Stroud Gas Light and Coke Co.	3	3	0
Swansea Corporation	2	2	0
Swindon Corporation	4	4	0
Swindon United Gas Co.	5	5	0
Thornbury R.D.C.	2	2	0
Tredegar U.D.C.	2	2	0
Wales and Monmouthshire Association of Gas Engineers and Managers	1	1	0
Warmley R.D.C.	2	2	0
Welshpool Gas Co. Ltd.	1	1	0
Weston-super-Mare Corporation	2	2	0
Weston-super-Mare and District Gas Company	1	1	0
Women's Gas Council	10	0	
Young, M.	10	6	
Ystradgynlais R.D.C.	2	2	0

Division 9—South East

Acton Corporation	4	4	0
Acworth, A. W.	10	6	
Acworth, Miss E. A.	1	1	0
Acworth, Miss W. B.	2	2	0
Adam, W. Wakefield	1	1	0
*Alston, Dr. J. M.	1	1	0
Andover Lighting and Power Co.	2	2	0
Ascot District Gas and Electricity Co.	2	2	0
Associated Gas and Water Undertakings Ltd.	3	10	0
Atkinson, Mrs. M.	1	0	0
Averill, C. R. Ltd.	1	1	0
Banbury Corporation	2	2	0
Banbury Gas Light and Coke Co.	1	1	0
Barber, S. S.	10	6	
Barking Corporation	5	5	0
Barnes Corporation	3	3	0
Bastian & Allen Ltd.	2	2	0
Battersea Corporation	10	10	0
Bedfordshire County Council	15	15	0
Bennett, M. J.	1	0	0
Bermondsey Corporation	4	4	0
Berry, Dr. J. A.	1	1	0
Bexley Corporation	5	5	0
Binderman, Mrs. A.	5	0	
Blacker, E.	10	6	
Bligh, Mrs. M. F.	10	0	
Bonston, T. L.	10	6	
Bournemouth Corporation	2	2	0
Bournemouth Gas and Water Co.	2	2	0

	£	s.	d.		£	s.	d.
Brighton Corporation	10	10	0	Herne Bay Gas Co.	1	1	0
Brighton, Hove and Worthing Gas Co. ...	5	5	0	Heston and Isleworth Corporation	5	5	0
British Electrical and Allied Manufacturers' Association	10	10	0	Hodgkinson, J. (Salford) Ltd.	5	5	0
British Electrical Development Association ...	100	0	0	Holborn Corporation	2	2	0
British Medical Association	10	10	0	Hopthorpe, Brig. H. E.	10	6	
Broadstairs Gas Company	1	1	0	Horde, Lord	5	5	0
Brooke, T. H.	10	6		Hornchurch U.D.C.	3	3	0
Browne, Dr. D. Warren	1	1	0	Hornsey Gas Co.	6	6	0
Buist, Cmdr. C.	10	6		Hutton, K. B.	10	6	
Buzzacott, J. O.	2	2	0	Hyland, A.	10	6	
Cable Makers' Association	10	10	0	Ideal Boilers and Radiators Ltd.	5	5	0
Camberwell Corporation	10	10	0	Ilford Corporation	10	10	0
Capper-Johnson, Dr. L.	10	6		Institute of Fuel	10	10	0
Carshalton U.D.C.	1	1	0	Institution of Electrical Engineers	26	5	0
*Chantler, P.	2	2	0	Institution of Heating & Ventilating Engineers	10	10	0
Charrington, Gardner, Lockett & Co. Ltd. ...	5	5	0	Jast, Mrs. L. S.	10	6	
Chatham Corporation	3	3	0	Kensington Corporation	1	1	0
Chelmsford Corporation	3	3	0	Kingston-upon-Thames Corporation	3	3	0
Chelsea Corporation	3	3	0	Kirkman, Mrs.	1	1	0
Chertsey Gas Consumers' Co	2	2	0	Kisbee, R. H.	10	6	
Chingford Corporation	3	3	0	Lambeth Corporation	1	1	0
Chislehurst and Sidcup U.D.C.	4	4	0	Lea Bridge and District Gas Co.	10	10	0
Clarke, D. K.	10	6		Lee, S. A.	10	6	
Clinch, H. G.	10	6		*Lessing, Dr. R.	1	1	0
Coal Utilization Joint Council	10	10	0	Letchworth U.D.C.	2	2	0
Coalite and Chemical Products Ltd.	15	15	0	Leveson Gower, Miss V.	5	5	0
Commercial Gas Company	3	3	0	Lewin, Dr. O. M. S.	1	1	0
Crayford U.D.C.	2	2	0	Lewisham Corporation	10	10	0
Crow, R. K.	10	6		Lewes Gas Company	3	3	0
Croydon Gas Company	10	10	0	Leyton Corporation	2	2	0
Dagenham Corporation	2	2	0	Liptak Furnace Arches Ltd.	2	2	0
Dartford Corporation	3	3	0	Lister, B. S.	1	0	0
Dartford R.D.C.	3	3	0	London and Counties Coke Association ...	52	10	0
Darwen, J.	1	1	0	London (City), Corporation of	26	5	0
Deal and Walmer Gas Co.	1	1	0	London and Home Counties Smoke Abate- ment Advisory Council	2	2	0
Dormer, A. E.	8	6		Luscombe, B. L.	10	6	
Dover Gas Co.	3	3	0	Luton Corporation	2	2	0
Ealing Corporation (1948)	2	2	0	M-Ghie, A. T. S.	10	6	
(1949)	2	2	0	*McLachlan, T.	10	6	
Eastbourne Gas Co.	2	2	0	MacTaggart, Sir John A.	2	2	0
East Cowes Gas Company	1	1	0	Maidenhead Corporation	3	3	0
East Ham Corporation	10	10	0	Maidstone Gas Company	3	3	0
East Kent Gas Co. Ltd.	1	1	0	Malden and Coombe Corporation	3	3	0
Edmonton Corporation	5	5	0	Margolis, A. E.	10	6	
Edwards Mrs. E. E.	10	6		Markham, Major S. F.	1	1	0
Electrical Association for Women	10	10	0	Matthews, Mrs. M.	10	6	
*Elsworthy, J. G.	1	11	6	Melland, B.	1	1	0
Enfield U.D.C.	1	1	0	Merton and Morden U.D.C.	4	4	0
Erith Corporation	3	3	0	Mid-Kent Gas Light and Coke Co.	1	1	0
Eton R.D.C.	3	3	0	Mitcham Corporation	2	2	0
Fareham U.D.C.	3	3	0	Morgan, Miss G.	10	6	
Farnborough U.D.C.	2	2	0	*Munro, Mrs. M. A.	10	6	
Feltham U.D.C.	3	3	0	Musgrave & Co. Ltd.	10	10	0
Finchley Corporation	4	4	0	Neilan, J. C.	10	6	
Finsbury Corporation	4	4	0	Nonhebel, G.	1	1	0
Folkestone Gas and Coke Co.	2	2	0	North Middlesex Gas Co.	10	10	0
*Foss, Mrs. A.	10	6		Oxford Corporation	10	10	0
Fry, Miss M.	1	0	0	Oxford and District Gas Co.	2	2	0
Gamble, W. H.	5	5	0	Oxford Preservation Trust	1	1	0
Gamlen, R. E.	1	1	0	Parkinson, B. R.	7	6	
*Gandy, Miss R. L.	10	6		Pollitzer, E.	2	2	0
Gas Council	52	10	0	Portsmouth Corporation	2	2	0
Gas Light and Coke Co.	26	10	0	Portsmouth and Gosport Gas Co.	1	1	0
General Electric Co. Ltd.	10	10	0	Powell, C. C.	1	10	6
George, A. K.	1	1	0	Rathbone, P. R.	10	6	
*Gillison, Dr. J. A.	1	1	0	Rayner, E. T.	2	2	0
Goodchild, C. R.	10	6		Reigate Corporation	1	1	0
Goodeve, Sir C. F.	1	1	0	Rheostatic Co. Ltd.	1	1	0
Gosport Corporation	2	2	0	Rhondda, Lady	10	6	
Graucob, F. Ltd.	2	2	0	Richards, Dr. H.	10	6	
Gravesend Corporation	3	3	0	Richmond, A. C.	10	6	
Gravesend and Milton Gas Co.	2	2	0	Richmond Corporation	3	3	0
Greenwood, T. A. S.	10	6		Roberts, J. M.	10	6	
Guildford Corporation	5	5	0	Robinson, Mrs. B. F.	2	2	0
Gummer, R. H.	1	1	0	Robinson, Mrs. E.	2	2	0
Hackney Corporation	10	10	0	Rochester, Chatham and Gillingham Gas Co.	10	10	0
Hammersmith Corporation	10	10	0	*Roper, Captain R.	10	6	
*Hampson, G. B.	10	6		Ryan, J.	10	6	
Hampstead Corporation	5	5	0	St. Albans Corporation	3	3	0
Harold Leather Mfg. Co. Ltd.	5	5	0	St. Marylebone Corporation	5	5	0
Harrow U.D.C.	10	10	0	St. Pancras Corporation	5	5	0
Hastings and St. Leonards Gas Co.	3	3	0	Samuel, Viscount and Lady	1	1	0

	£	s.	d.		£	s.	d.
*Sanger, Mrs. A. D.	1	0	0	Des Voeux, Mrs. M. A.	5	5	0
Sanitary Inspectors' Association	10	10	0	*Wadham, Miss D.	1	0	0
Sempill, Lord	1	1	0	Walthamstow Corporation	10	10	0
Sheppy Gas Company	2	2	0	Wandsworth Corporation	5	5	0
Shoreditch Corporation	3	3	0	Wandsworth and District Gas Co.	10	10	0
Sittingbourne District Gas Co.	1	1	0	Wanstead and Woodford Corporation	4	4	0
Slough Corporation	3	3	0	Ward, Dr. F. A. B.	2	2	0
Slough Gas and Coke Co.	21	0	0	Watford Corporation	4	4	0
*Smith, D. V. H.	2	2	0	Wembley Corporation	10	10	0
Smith, Sir Ernest	2	2	0	West Ham Corporation (1948)	1	1	0
Smith & Wellstood Ltd.	1	1	0	(1949)	1	1	0
Solid Smokeless Fuels Federation	10	10	0	Westminster City Council	15	15	0
Southall Corporation	3	3	0	White, Dr. H. D. J.	10	6	
Southampton Corporation	1	1	0	Whitstable Gas and Coke Co.	1	1	0
Southampton Gas Light and Coke Co.	10	10	0	Wicksteed, J. H.	10	10	0
South Eastern Electricity Board	10	10	0	Willesden Corporation	10	10	0
South Eastern Gas Corporation Ltd.	10	10	0	Wimbledon Corporation	4	4	0
Southend-on-Sea Corporation	10	10	0	Windsor Corporation	2	2	0
Southern Gas Board	1	1	0	Windsor R.D.C.	2	2	0
South Suburban Gas Co.	10	10	0	Windsor Royal Gas Light Co.	4	4	0
Southwark Corporation	5	5	0	Winkworth, Mrs. D. M.	5	5	0
Southwell, W. E.	10	6		Women's Advisory Council on Solid Fuel	5	5	0
Southwick U.D.C.	2	2	0	Women's Gas Council	10	10	0
Stepney Corporation	4	4	0	Woodall-Duckham Vertical Retort Co. Ltd.	10	10	0
Stoke Newington Corporation	3	3	0	Wood Green Corporation (1948)	2	2	0
Sturtevant Engineering Co. Ltd.	2	2	0	(1949)	2	2	0
Sutton and Cheam Corporation	5	5	0				
Thackeray, Mrs. L. E.	5	0					
Thurrock U.D.C.	4	4	0				
Tiranti, A.	5	0					
Tottenham Corporation (1948)	10	10	0				
(1949)	10	10	0				
Tottenham and District Gas Co.	10	10	0				
Trier, F. Newton	1	1	0				
Tunbridge Wells Gas Co.	6	6	0				
Uxbridge, Maidenhead, Wycombe and District Gas Co.	10	10	0				
Uxbridge U.D.C.	3	3	0				
Vaughan-Cowell, Lt.-Col. A.	1	1	0				

Overseas Subscriptions

Hebley, H. F. (U.S.A.)	1	1	0
Reif, A. E. (U.S.A.)	1	1	0
Vereeniging Town Council (S.A.)	1	1	0
Willam, Dr. A. (Belgium)	10	6	
Wurts, T. C. (U.S.A.)	10	6	
Subscriptions and donations under 5s.	5	0	
Total	£3,561	3	6

Information about the Society

The forerunners of the Society were the Coal Smoke Abatement Society, established in London in 1899, and the Smoke Abatement League of Great Britain (1909), which was concerned mainly with the Provinces. The two bodies amalgamated in 1929 to form the present Society. In 1945 its growth and increasing influence made necessary a new constitution to which reference should be made for further information about membership, officers, Executive Council and Committees, etc.

Divisions

For electoral purposes and, where it is desired, area organization, the Society is now composed of the following geographical Divisions: (1) Scotland, (2) Northern Ireland, (3) North West, (4) North East, (5) Yorkshire, (6) West Midlands, (7) East Midlands, (8) South West, (9) South East. (See Constitution for the counties in each Division).

Membership

The Society is wholly dependent on the contributions of its members for the maintenance and growth of its work, and invites the support of all who sympathize with and wish to promote its objects. These, to quote from the Constitution, are "to secure throughout the United Kingdom the maximum of natural light and air free from every form of pollution, and particularly that arising from the combustion of fuel."

There are four classes of membership—for individuals, local authorities, institutions and corporate bodies such as firms and public undertakings. Particulars of membership are given on the next page.

Individual members and the representatives of other members have rights of nomination and voting in elections for Officers and Council. They receive, free of

charge, the Society's quarterly journal *SMOKELESS AIR*, and other publications. They are entitled to receive assistance and information on problems relating to smoke abatement. In addition to receiving notices of meetings and conferences organised nationally, they are entitled to participate in any activities organized by or in their own Division.

Associates

Any individual, local authority, institution or corporate body contributing less than the appropriate membership subscription may become an *Associate*, entitled to some of the privileges of membership, but not to those relating to nomination, voting and election to office.

Subscriptions

INDIVIDUAL MEMBERS—Not less than 10s. 6d. a year.

LOCAL AUTHORITY MEMBERS—Not less than the following amounts, according to populations :

Less than 25,000	...	...	...	2 guineas
25,000 to 50,000	...	...	...	3 „
50,000 to 75,000	...	...	...	4 „
75,000 to 100,000	...	...	...	5 „
100,000 to 250,000	...	...	...	10 „
250,000 to 500,000	...	...	...	15 „
Over 500,000	...	...	...	25 „

INSTITUTION MEMBERS (which includes Societies, Associations and Groups) *and*

CORPORATE MEMBERS (which includes Companies, Firms, and Departments of Local Authorities)—Not less than 10 guineas for members appointing two Representatives ; not less than 5 guineas for members appointing one Representative.

SPECIAL CASES—The Executive Council may consider applications for membership on special terms as to subscriptions and otherwise. This rule is intended to apply in particular to local and other small voluntary associations wishing to become Institution Members.

ASSOCIATES—Any sum that is less than the appropriate subscription for membership.

DONATIONS—The Society will be pleased to receive single or annual donations for any amounts from non-members.

PUBLICATIONS—Annual subscriptions may be made for “ Smokeless Air ” and for other publications as issued.

PAYMENT OF SUBSCRIPTIONS—The first subscription should be forwarded with application for membership. This may be sent at any time, and the subscription remains in force until the first day of the corresponding month of the following year. It is mutually advantageous if subscriptions are made by Banker's Order.

Representatives

Local Authority, Institution and Corporate Members are entitled to appoint Representatives to exercise on their behalf the rights of members as regards nomination for office, voting, and receipt of publications, etc. Institution and Corporate Members may appoint one or two representatives each, and Local Authority Members a number according to population, as follows :

Less than 100,000	...	...	...	2
100,000 to 250,000	...	...	...	3
250,000 to 500,000	...	...	...	4
500,000 and over	...	...	...	5

The names and addresses of Representatives should be forwarded on making application for membership, so that they may be entered in the Voting Registers.

Services to Members

Information and Advice

Members may obtain, free of charge, advice, assistance, and information on matters relating to atmospheric pollution and its prevention, provided that, where necessary, the request is approved by the Executive Council.

Library

The Society possesses an extensive collection of books, reports and pamphlets, British and foreign, on atmospheric pollution and related subjects, with bound annual volumes of Press cuttings. Copies may be borrowed or consulted by arrangement.

Lectures

The Society will be pleased to help members and others to arrange lectures and talks of all kinds in any part of the country on atmospheric pollution and related subjects.

Lantern Slides

A collection of lantern slides is available and slides may be borrowed at a charge of 1d. per slide per lecture, plus registered postages.

Films

The Society does not at present possess films of its own but will be glad to suggest appropriate films that may be available from other sources.

Exhibits

The Society is prepared to consider participating in exhibitions and has material available on loan. Inquiries should be made as early as possible in advance and should give full details of requirements. In view of transport and packing difficulties material can be loaned more conveniently if it can be collected from and returned to Chandos House by car or van. Carriage costs are charged where material is sent by public transport.

Posters

The following posters are available : (1) Set of pictorial and letterpress posters designed for use on ex-E.M.B. frames, but can be used singly. Price 2s. 6d. per set. (2) New prize-winning photo-colour poster, 30 in. x 20 in. Price 6d. each. (3) New pictorial chart primarily for school use, "These are the Things that Smoke Does," 30 in. x 20 in. Price 6d. Reduced prices for quantities. Posters may be supplied free of charge in appropriate cases.

Literature

Inquiries are invited on the supply of publications, give-away leaflets, etc., for special purposes. Particulars of the Society's "Guide to Publications" will be found on another page.

Photographs

The Society has a classified and indexed collection of smoke and other photographs, comprising over 250 subjects and suitable for reproduction and/or exhibition purposes. Prints may be inspected or selections sent by post if details of requirements are given. Reproduction fees, where chargeable, are at standard rates.

New photographs of high pictorial quality, with reproduction rights, are required either as gifts or for payment at standard rates.

The Covenant Subscription Scheme

Particulars of the scheme that enables you to increase, without extra cost, the benefit of your subscription to the Society. We invite you to consider it.

For the purpose of the scheme the Society is recognised as a “charity” by the Commissioners of Inland Revenue, and it may claim for its own use the amount of the income tax that has been paid on the subscriptions it receives, provided that the subscriber has signed an agreement to subscribe a stated sum annually for a period of at least seven years.

Thus, if a member agrees to subscribe £5 a year, this amount is considered as what remains after a larger gross sum has been taxed, and the Society is able to claim the difference. With income tax at 9s. in the £ the gross amount is £9 1s. 10d., and the Society thus receives £4 1s. 10d. from the authorities. The benefit to the Society is thus nearly doubled at no further cost to the subscriber. A lower rate of tax would reduce the amount so recovered, but an increased benefit to the Society remains.

The only obligation into which the subscriber enters in order to assist the Society in this way is to covenant to continue the subscription for a minimum period of seven years, or during his life, whichever period should be shorter.

After the covenant has been signed the subscriber is not required to take any further action other than duly forwarding his annual subscription (or more conveniently paying it by Banker’s

Order) and signing an Inland Revenue certificate which will be sent to him each year by the Society, to the effect that the subscription has in fact been paid and has been drawn from his “general fund of taxed income.” The certificate will show the gross amount from which tax has been deducted, and the subscriber will be entitled to show such gross amount as a “charge” in his return of income for tax purposes, an advantage some will appreciate.

A specimen form of covenant is given below. Such a document may be prepared on plain paper by the subscriber, and, after being signed and witnessed, sent to the Society. If preferred, the Society will prepare and forward a document on receipt of the particulars required (*i.e.*, name in full, address in full, description or occupation, and the amount to be paid annually to the Society). The required stamping of the document will be attended to by the Society.

It will be noted that the gross amount concerned varies according to the rate of income tax, but that the sum that the subscriber pays direct to the Society does not alter. It is this sum that is stated in the covenant.

The specimen is in the form required by individuals, but corporate bodies will no doubt be able to modify it as may be required.

SPECIMEN OF COVENANT

I (name) of
(address).....(description or occupation)

HEREBY COVENANT with the National Smoke Abatement Society, of Chandos House, Buckingham Gate, in the City of Westminster, that for a period of seven years from the first day of....., 195....., or during my life whichever period shall be shorter, I will pay annually to the said Society such a sum as will after the deduction of income tax at the rate for the time being in force amount to the sum of..... (amount in words), such sum to be paid from my general fund of taxed income.

IN WITNESS whereof I have hereunto set my hand and seal this..... day of.....195.....

<i>Signed, sealed and delivered by the said</i> <i>in the presence of</i>	} (Signature).....
<i>Signature (witness)</i>	
<i>Address</i>	
<i>Occupation</i>	

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W. R. Hornby Steer

"Those who are desirous of becoming conversant with the problems of the law of smoke abatement could do no better than peruse this splendid book, which deals with the history of the subject, with common law as well as statute law, with shipping, railways and joint action of local authorities."—*Municipal Engineering*.

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(Published by Faber & Faber Ltd.)

21s. By post, 21s. 6d.

The Divisions of the Society

